Clinical Lecture
ON
THREE CASES OF SEVERE INJURY TO THE HEAD.

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GENTLEMEN,—The first case I bring under your notice to-day is the man I now show you, who has been under observation for some time in the wards. His history is as follows. He was admitted on October 16th—that is, fully three weeks ago. The account given of him was that when drunk he fell down a stone staircase, lighting on the back of his head with considerable force. He was brought to the hospital, and his condition was found to be this. On the back of the head there was a contused wound of the scalp running crossways and about one and a half to two inches in length. The bleeding was considerable. The wound extended in depth to the bone, the pericranium being laid bare. On examining with the finger there was no slit or depression in the bone. Blood was issuing in moderate quantity from the nose and left ear. Generally, the patient was insensible and lay on his back with the muscles of the extremities relaxed. The face was pale, the skin generally blanched, with the surfaces cold (temperature lowered). The pupils were regular, rather dilated, acting slowly to light. The breathing was shallow and quiet, with occasional sighing. The pulse was 60, small, empty, and uneven. The treatment adopted was simply application of warmth to the surface of the body, and attention to the wound, which was washed with a solution of carbolic acid and dressed with antiseptic dressings.

October 17th: Pallor on left face and skin; patient beginning to be restless; insensibility not so deep; can be more easily roused; is irritable when disturbed, especially if his eyes, which are kept firmly closed, be opened; speaks incoherent when roused. Retention of urine, catheter had to be used. Pulse 100, fuller, quicker, and more even; temperature 101°. Wound doing well.—18th: Patient still restless and irritable; lies on his side with legs and arms flexed; face flushed and head hot. Pulse 102; temperature 102°. Cold applied to head. Wound doing well.—19th: Patient still restless, irritable, confused, and incoherent. Pulse 108; temperature rose in the evening to 103·5°. Patient had an enema of house medicine and soap. Use of catheter no longer necessary. The high temperature continued for several days, and gradually subsided; the patient gradually regained consciousness and became rational. Pain in the head was complained of and deafness. He is now as you see him, almost well. He complains occasionally of pain in the head, and feels dizzy when he stands up. His memory is somewhat defective, and his manner generally is peculiar. Temperature and pulse are normal. On the left ear he is very deaf. On examination with the speculum, there is a raw line extending across the membrana tympani, pointing to a rent having been present.

The second case I shall relate is a most interesting one. About two years ago I was called to see a youth, aged seventeen, who had sustained a severe injury to the head. The history I got was that the lad was standing with his hands in his pockets near some companions who were throwing the hammer. His back happened to be to the thrower. The hammer swerved from a straight course, and made directly for the boy's head. He was called to, ducked his head, but only so far as to bring it exactly athwart the parabolic course of the weapon, which felled him bleeding to the ground. When I saw him he was lying on the floor of a house into which he had been carried. On the upper and back part of the head to the left side there was a wound surrounded by a considerable swelling of a soft, doughy nature with hard edges. Generally, he was insensible, or could be roused slightly when spoken to very loudly; the face was pale, and the surface of the body cold; the breathing was shallow, quick, and tolerably regular with occasional sighing; the pupils were unaffected, sensitive, though somewhat slowly, to light. On consultation with Dr. Rodger it was resolved to enlarge the existing wound, and evacuate the blood effused into or below the scalp. This was done in order to examine the state of the bone. On doing so, and getting rid of a large quantity of effused blood, there was found a large, deep, circular depression of the skull, with a diameter of at least three inches, and corresponding to the globular hammer which struck it. The outer table of the skull was shattered, several large fragments were removed, and these I now show you. The inner table was depressed but regular—that is to say, there appeared to be no spiculæ projecting into the brain likely to give rise to irritation. As the symptoms were solely those of concussion, and no signs whatever of compression manifested themselves, the edges of the wound were brought together, except at the centre, where a sufficient opening for the escape of any discharge was left. Cold water dressings were applied. Some time after this the patient vomited. Now, gentlemen, it would but weary you to detail the course of this case. Suffice it to say that it ran uninterruptedly towards recovery. Under the influence of warmth to the surface of the body the symptoms of collapse gradually wore off. The mental symptoms disappeared, and consciousness was slowly recovered. There was no great reaction. The temperature at no time rose much above 100°. From first to last there was no unequivocal sign of compression. The wound healed slowly by granulation. The youth is now in perfect health, bodily and mental—bereft, it is true, of a large piece of the outer table of his skull, and having a permanent depression of great depth and size of the inner table.

The third case is that of a dyer, aged fifty-three, who was admitted into Jacob's Ward on the forenoon of Saturday the 22nd of May last. The account was that when drunk he had, that forenoon about 10 o'clock, fallen down a stone staircase and alighted on the top of his head. At the visit at 12 o'clock his condition was as follows. He was lying on his back, insensible but not profoundly so, for he could be roused when spoken to loudly, but only roused. His face was pale, surface of body cold. The pulse was about 80, small and empty. The breathing, though slow, was shallow. The pupils were slightly contracted but regular. On the top of the head, on the right parietal and frontal bones, there was a slight swelling, but no wound or depression. That was at 12 o'clock. In about an hour and a quarter—that is, about three hours and a quarter after the receipt of the injury, matters had very much changed. The insensibility had increased and developed into profound coma. The pupils were now irregular, the left was much dilated and right still contracted. The breathing was slow, deep, stertorous, with puffing of the cheeks. The pulse was fuller and slower. The left arm and leg were rigid as compared with the right. The urine was retained and contained albumen. The swelling on the top of the head was much more distinct. Rapid intracranial effusion of blood was diagnosed. A consultation was held to consider the propriety of an operation. It was concluded not to operate on the grounds that the patient appeared to be moribund, and it was impossible to say in what part of the brain the bleeding was taking place, whether on the surface or at the base. This decision I afterwards had reason to regret. Meanwhile the symptoms progressed. The rigid muscles of the left side became paralysed. The face became flushed, and perspiration poured from it. The pulse was now full and very slow, but immediately before death small and quick. The temperature rose, and immediately before death was 104°. The patient died thirty-eight hours after the receipt of the injury. At the post-mortem examination there was extravasation of blood in the scalp over the right frontal and parietal bones. There was simple fissure of the skull, at the anterior part being separation of the inter-parietal suture, and, as it extended backwards, diverging into the right parietal bone. There was no depression. The upper surface of the brain was lacerated, and a large quantity of blood effused below the dura mater. The kidneys were granular.

Injuries to the head have always had and always will have a peculiar interest to the surgeon. In the literature of surgery affections of the head and brain occupy a very prominent place. Since the classical writings of Pott and Abernethy much has been written on these, as they have received the most careful attention from all surgeons of

note. For this there are many obvious reasons. Extremely liable to injuries of various degrees of severity, from slight cut or bruise of the scalp to severe compound fracture of the skull and laceration of the brain, it falls to the lot of every surgeon, nay, every practitioner, to treat many of these, and on the judicious or other management of even the apparently most trivial cut may depend to the patient consequences of the gravest kind. In these the possible dangers immediate or remote are very many, and in these more than in any other affections that I know of is the unexpected wont to take place. A patient comes to you with a slight cut on the head the result of a fall or blow. You, thinking the matter trivial, assure your patient that the injury is of no moment, and dismiss him after a two minutes' consultation, occupied mainly with general remarks. You hear nothing of him for a day or two, when you are sent for to see him and find him in bed. A rigor and it may be sickness have seized him. The wound looks angry, a suspicious redness surrounds its edges. Great general depression characterises your patient, and despite all your precautions your patient, especially if he be an elderly and debilitated individual, is dead within a week of receiving his injury from erysipelas of the most malignant type. On the other hand, you are called to a case where very severe injury has been received. You find severe contusion to the scalp and soft parts, unmistakable fracture of some part of the skull, and with it very great depression, while the general appearance of the patient is alarming in the extreme. You rapidly form and express a prognosis of the worst kind. Notwithstanding this the patient may take a turn, reaction set in, and complete recovery take place. Now these are no fancy pictures, they occur in practice every day, and the fact that they do teaches these two lessons. In the first place think not too lightly of any injury to the head, however slight it may at first sight appear; warn your patient of the possibility of serious mischief accruing if the wound be neglected, and if serious consequences follow—as they may do in any case—then you are commended for your foresight. On the other hand, however desperate the case may appear, do not too rashly volunteer a bad or fatal prognosis, as you may find yourself very unexpectedly in the wrong. Hippocrates it is, think, who, with his usual sagacity, has a remark to this effect, that no wound of the head is too trivial to be neglected, and no injury too severe to be beyond hope; and Hippocrates undoubtedly is right.

Now, with these general remarks, let us look a little more closely at the cases I have brought under your notice. These are very fair examples of the conditions known as "cerebral irritation," "concussion," or commotion of French writers, and "compression." Now, the first remark I would make is that one of the difficulties we, as clinical teachers, have to contend with is that students straight from systematic lectures, or from reading books, are apt to expect to find cases much more typical, so to speak, than they usually are. For example, take "concussion" and "cerebral irritation," two conditions, each presenting a certain series of symptoms, with which you are familiar in your systematic lectures. Now, you find, and this is only a necessary condition of the systematic exposition of a subject such as the one under consideration, certain symptoms given as characterising the one, and certain symptoms as belonging to the other of these states. From this you would expect to find in actual practice each example of the one condition or of the other sharply defined, so that you would be enabled to say categorically this is "cerebral irritation," or this is "concussion," as the case may be. This is far from what you will really experience. The science of clinical surgery is of the most concrete kind, each case forming a problem to be solved in itself, generalisations being only to a certain extent applicable.

Of the cases I have cited two recovered and one proved fatal. Look particularly at the symptoms of the early stage, and you will be struck with the similarity of these in all three cases. In all there had been a severe blow to the head. In all three there was immediate insensibility; in all three there were paleness of face and pallor of body; in all three there was shallow breathing; in all three there was small, rather slow, empty pulse; in all three the pupils were neither dilated nor contracted, but regular and acting slowly to light. These lasted for a longer or shorter time in all three. Now, what do these symptoms point to? Well, they are just the symptoms of "concussion"—that is to say, they are the symptoms which you find after a severe blow to the head, when either recovery may take place, or death may quickly follow, and the post-mortem examination may show neither depression of the skull, nor laceration of the brain, nor effusion of blood. In other words, there was in all three, disregarding meanwhile the termination of the cases, a first stage of "concussion." This is what, I believe, happens in the great majority, if not in all, cases of severe injury to the head; indeed it is difficult to conceive of the possibility of force sufficient to cause fracture or laceration of the brain and hæmorrhage being applied to the skull without causing this "concussion," especially when it is remembered that a mere blow from the fist often suffices to cause stunning, which is no other than slight concussion with temporary effects. From this statement it follows that it is, strictly speaking, incorrect to compare or contrast "concussion" with "cerebral irritation" and "compression;" for, as we shall afterwards see, these belong to different stages altogether of the effects of a blow.

Now, what is this "concussion"? What is this obscure, mysterious condition which is accompanied by symptoms so severe, and which may be so transient? Much has been written on this subject, and the older writers were greatly in the dark about it. They were therefore left to assumptions which recent investigations have clearly proved to be untenable. Before referring to the explanations which have been offered, I should like to point out that the one outstanding symptom common to these cases is insensibility of greater or less profundity and of longer or shorter duration. This points to a suspension of the functions of the cerebrum, and the question is, "How does a blow, how can a blow effect this? The answer to this resolves itself into an account of what pathology and physiology have taught us on the matter. It must be remarked that the pathological changes in the brain are often remarkably slight to appearance and may be overlooked. This it was that misled Pott and writers of his time, and drove them to the first assumption in regard to the condition of the brain—viz., that as a result of the blow vibrations occurred; these reverberated from the side of the skull opposite to that receiving the blow; and thus, by a series of reverberating vibrations, there was caused molecular displacement of the minute elements of the brain. Now, gentlemen, consider for one moment, and do you think it at all probable, having regard to the extremely fine constitution of the brain, that all this shaking can take place without producing laceration and consequent hæmorrhage? But apart from this, is there reason to believe that a blow, however severe, can, in the conditions in which the brain is placed—viz., in a cavity with unyielding walls, and completely filling that cavity—I say is there reason to believe that a blow can produce such a through and through shaking and misplacement of molecules as this theory supposes? Experiments of a very interesting kind come to help us here, and, to my mind, settle the question in the negative. Alquié and Gama took a glass vessel, filled it with material of the consistence of brain, suspended in it a number of fine dark threads, and then concussed the vessel. No motion of the threads whatever was observed, showing that, although there may have been motion of the whole mass, the individual particles did not move. Similarly skulls filled with sand, in which an opening covered with a membrane had been made, and into which a long needle with paper on the end had been sunk, gave entirely negative results. There is, in fact, no evidence that such molecular changes as supposed by Pott to take place occur, and his theory consequently falls to the ground.

Another theory is that based on the discovery of Rokitanski and Nélaton—viz., a number of minute extravasations of blood in the brain. The theory was that the pathology of concussion was just a contusion of the brain with small extravasations. Unfortunately for this theory, it is an undoubted fact that cases occur where these apoplexies are entirely absent; and all, therefore, that can be inferred from their presence is that concussion and contusion occasionally co-exist.

I come now to the third and by far the most feasible theory of concussion—viz., that propounded by Fischer of Breslau.[1] It is shortly stated this: The blow to the head produces reflex paralysis of the vessels of the brain. Serious interference with the nutrition of the cerebral ganglia is produced, and this it is which gives rise to the symptoms of concussion. In this connexion it is necessary to state that the one constant condition found post-mortem in fatal cases

[1] For a full discussion of this theory see a very interesting clinical lecture, entitled Ueber die Commotio Cerebri, by Fischer, forming No. 27 of Volkmann's Sammlung Klinischer Vorträge. 1871.

of concussion is an empty state of the arteries and a congested state of the veins. This is the pathology of concussion. Looking at the question from a clinical point of view, and without going minutely into the matter, which would be impossible now, it will suffice to ask, and if possible answer, two questions—viz., 1. Can a blow applied to the head produce this paralysed state of the vessels? 2. Given this condition of the vessels, does it account for the pathological appearances found after death and the symptoms during life? In regard to the first question, there is evidence that a blow can produce such a condition. It is well known that irritation applied to the skin may produce a marked reflex effect on the vessels of the brain and elsewhere. Nothnagel irritated by electricity the skin in the neighbourhood of the crural nerve in rabbits, and thus produced reflex contraction of the vessels of the pia mater. This contraction, however, was always of very short duration, and, as Fischer points out, does not explain the duration of the symptoms of concussion. Other experiments, however, are more to the point. Goltz has shown, in his well-known experiment of giving a blow to the belly of a frog, that paralysis of the heart and vessels can be produced, and that symptoms very similar to those of concussion accompany it, while Koch and Filehne, by concussing the skulls of dogs and rabbits by a series of rapid blows with a hammer, produced the same results. These experiments certainly go very far to answer in the affirmative the first question. In regard to the second question it is sufficient to say that an empty state of the arteries and a congested state of the veins is the only condition which is found constantly to accompany the symptoms which clinical observation discovers to be those of concussion, and that this condition is that which results from paralysis of the vessels and, it may be, a partly paralysed state of the heart. So much for what I have called the first stage of all the three cases, and its explanation. In all three the symptoms were identical; the cases differed only in the duration of this stage.

On following the cases further, they are now found to diverge. What is called reaction sets in. The paralysed condition of the vessels and heart begins to wear off. The tide of stronger circulation sets in. In the first case the symptoms I have described manifested themselves. They were—(1) Patient extremely irritable; (2) patient lying on side, with legs drawn up; (3) eyelids firmly closed; (4) quick pulse and fever, temperature reaching 103°; (5) mental symptoms lasting two or three weeks. Now, what do these symptoms indicate? They are fairly marked symptoms of a condition which has been called "cerebral irritation," and what is that? I believe it to be no other than a variety of the stage of reaction, or more properly perhaps a degree of reaction. It is probably due to a hyperæmic state of the brain, more particularly of the meninges, as evidenced by considerable rise of temperature and febrile symptoms generally. The symptoms of this condition have always appeared to me to be very similar to those found in non-traumatic cases where inflammation of the membranes of the brain is believed to exist. But what of laceration of the surface of the brain? Is that not the pathology of cerebral irritation? There is no positive evidence to show that it is. Experiments on animals prove that the cerebrum can be cut or torn to a considerable extent without giving rise to marked symptoms. Clinical experience points to the same conclusion. In a remarkable case which happened in this hospital, under the charge of the late Dr. Kerr, where a man bending forward in front of a circular saw in motion had his forehead ripped open, and the brain so lacerated or torn that a considerable quantity of brain substance escaped, recovery took place without any marked cerebral symptom whatever. It is extremely doubtful if laceration *per se*, and apart from hæmorrhage and secondary changes, does give rise to any symptoms other than those that would result from destruction of the part of the brain lacerated. It is certainly not rational to ascribe the symptoms of cerebral irritation to superficial laceration. Be the exact pathology of cerebral irritation what it may—and our knowledge of matters cerebral is anything but complete—what I wish to point out is that, looked at clinically, it belongs to the second reactive stage of concussion, and it is therefore unscientific, as inconsistent with observation and fact, to contrast it with this as if it were a distinct condition *ab initio*. One other symptom in this case calls for remark—viz., bleeding from the ear. What did that indicate? In this case probably only rupture of the membrana tympani. There was no escape of clear fluid, and therefore nothing to point to fracture of the base of the skull.

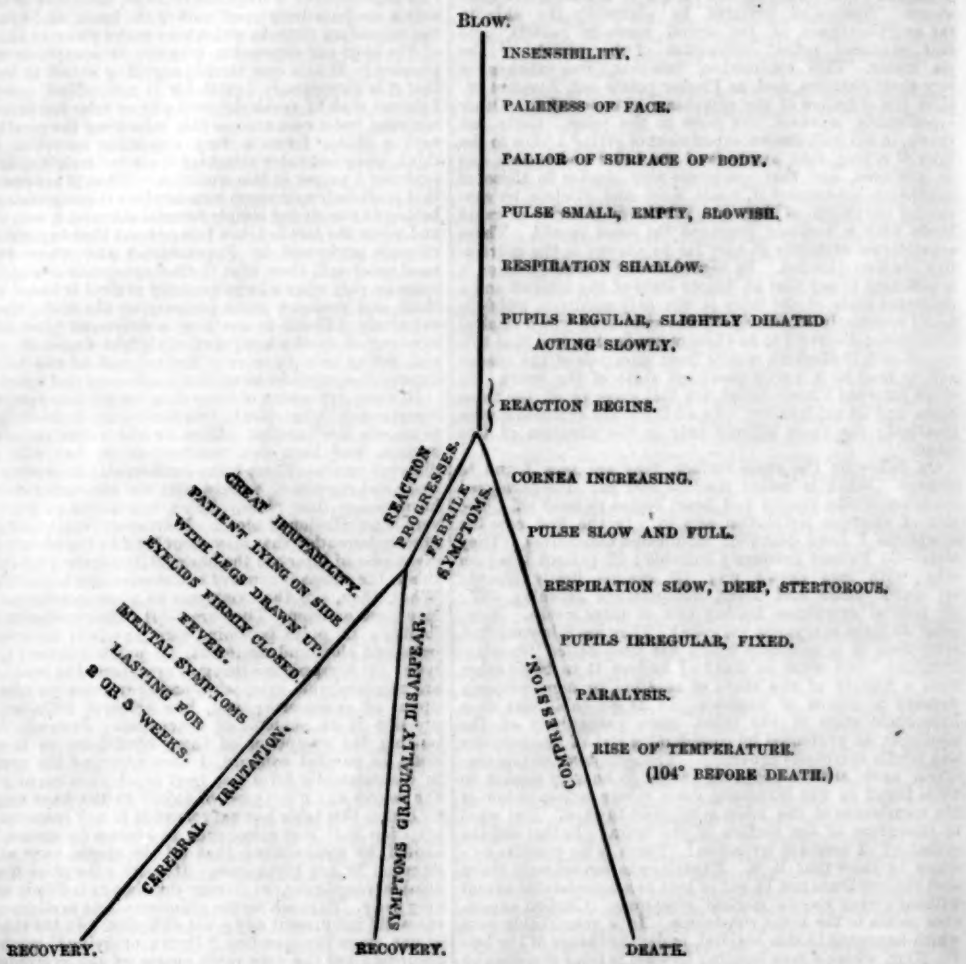
The second case was a more typical one of concussion, where the symptoms gradually subsided, the general paleness disappeared, the pulse recovered, and consciousness gradually returned. Vomiting took place as reaction began. The reactive febrile symptoms were moderate. Perfect recovery took place. The interest attaching to this case was the depression of the skull. In this case there was about as much depression as well could be, and yet from first to last there was not a single symptom of compression. Now, this raises the important question, Can depression of a fragment of bone, acting as it does on only a comparatively small part of the brain, and apart from any secondary changes which may make place as the result of the blow and depression, give rise to symptoms of compression? If this case teaches anything at all it indicates that it is exceedingly doubtful if it can. Now, gentlemen, I do not wish to speak dogmatically or infer too much from one case, but a case such as this, admitting the possibility of such a thing, forms a very staggering exception, and, I think, has great value attaching to it when weighing facts and evidence *à propos* of this question. When it is remembered that previously symptoms were ascribed to compression which belong to concussion simply because depression was present, and when the fact is taken into account that experiments on animals performed by Pagenstecher and others (which I need not detail) show that distinct symptoms of compression come on only after a large quantity of fluid is forced into the skull and produces great pressure on the brain, then it is extremely difficult to see how a depressed piece of bone, exerting at most a comparatively slight degree of pressure and acting only on a very limited part of the brain, can determine symptoms so marked as those of real compression.

If, then, depression of bone does not produce symptoms of compression, what does? Our third case, I think, goes far to answer this question. Here we had a first stage of concussion, and here, too, reaction set in, but with a very different result. There being considerable laceration of the brain and rupture of vessels, with the recovering circulation hæmorrhage took place. There was found post mortem a very large effusion of blood. Now, apart from an effusion or abscess formation that may occur later in the history of any given case of injury to the brain, it is highly probable that this is the constant cause of real compression occurring early. What, then, are the symptoms of these conditions? Our case gives us them. They are:—(1) Coma increasing in profundity; (2) pulse becoming slow and full; (3) respiration becoming slow and stertorous; (4) pupils uneven; (5) paralysis; (6) temperature rising as symptoms increase. These are unmistakable symptoms, and they come on after symptoms of concussion; and, like cerebral irritation, compression is an outcome of concussion. Instead, then, of putting the symptoms of these conditions, as is usually done, in parallel columns, I have arranged the symptoms in diagrammatic form (see next page), showing at a glance the course any given case of injury to the head may take. Of course this table has not reference to any secondary complication that may arise, such as abscess formation, and it should be remembered that all the stages vary much in duration in any given case. If death take place from concussion *simpliciter*, as it may do, then it is likely to occur very early. So much for the symptoms. As to *diagnosis*, our cases did not present any great difficulty. In the third case, at one stage the question "Drunk or dying?" might have occurred; but the very rapid course of the symptoms very soon made the real state of matters clear.

Now, gentlemen, what do these cases teach us as to the *treatment* of severe injury to the skull? In other words, suppose you were called to see a case similar to any of these I have described; what would you do? and why? In the first stage the indications would be to restore the enfeebled circulation. This is effected by applying warmth to the surface of the body by means of hot bottles, &c. If the collapse be profound friction to the surface of the body, or the application of an irritant, such as mustard, will do good. It is no use being too officious at this stage, as time must be allowed. During the reactive stage, if there be symptoms such as those we have in the first case—viz., those of so-called cerebral irritation, then cold to the head, shaving the hair, darkening the room to obviate the irritating effects of light, will be beneficial. If there be insomnia bromide of potassium, alone or combined with chloral, will be found useful. In all cases attend to the bladder and bowels,

keeping the latter tolerably freely open. In cases such as the second the indications for treatment are few beyond attention to the bowels. But this case and the third case suggest very interesting questions as to local treatment, and more particularly as to when and what operative procedure should be employed. What are the conditions that render early trephining necessary? This is the great question that has divided surgeons. Pott laid down the law very strongly that this operation should be done in all cases of fracture of the skull with depression, and, after describing the operation and various measures to be employed, he complacently

fracture with depression is not an indication for operating. This is just exactly what would be expected from what I have already said when discussing the symptoms as to depression being a cause *per se* of compression. Depression of a part of the skull, it was argued, cannot give rise to symptoms of compression. Elevation, therefore, is no use. But what of our third case? In this case there were indications for trephining; and I regretted that the operation was not done, although the reasons for not doing it were quite valid. There were distinct indications of compression, although without depression, and it would have been interesting to have



indicates that the surgeon who has adopted these may say to himself, in the words of Pope,—

"Thus far was right; the rest we leave to heaven."

Heaven, however, was not in many cases too propitious. This dictum of Pott's was followed by surgeons at the time blindly. Thus it has been too often in the history of surgery. Many a *hereditas damnosa* has been handed down in this way. Abernethy, however, put a check on it; and from the observation of cases where he found that fracture with depression did not of itself in every case, or in the majority of cases, prove fatal, advised waiting for symptoms. He simply used his own judgment, and he was right. What do our cases teach as to this point? If there be anything that our second case proves at all, it is this, that fracture of the skull with marked depression is not an indication for trephining. But it teaches more: it shows that compound

seen if these would have been relieved by opening the skull. Here, again, we have corroborated what we have previously said as to the cause of symptoms of depression coming on early—viz., that they are probably due in all cases to rapid intra-cranial hæmorrhage. What, then, are the indications for trephining early in severe injury to the skull? They may be, I think, arranged under the two following heads:—

1. When there is reason to believe that there is rapid intra-cranial hæmorrhage going on with or without depression. This fact will generally be indicated by such symptoms as I have described in the third case, but a presumption may be afforded in favour of bleeding from the exact situation of the injury. For instance, if there be a fracture at the anterior inferior angle of the parietal bone, it is quite possible that the middle meningeal artery may be injured. This does occasionally happen, and should be kept in view.

2. When a foreign body has penetrated the skull and is

lodged in the brain, and cannot be removed without enlarging the opening. These are the indications for early trephining. But what, you will say, of stellate fractures, do these not present absolute indications for operating? In answer to this I would say that it is extremely questionable if they do. But granting that they do they come under this second head, for in these the presumption is that the inner table of the skull being shattered the fragments are driven in upon the membranes and are thus for all practical purposes foreign bodies which sooner or later will by their irritation cause inflammation of the membranes of the brain.

Gentlemen, I have touched upon various points of great interest in connexion with injuries to the head. It has not been possible to discuss these fully within the limits of one lecture. I have endeavoured to explain the more salient symptoms of the cases I have described to you and to draw what practical conclusions the facts fully warrant. I trust that what I have said will in some measure stimulate you to the study of these all-important affections.

ABSTRACTS OF
Lectures
ON
DIGESTION.

Delivered before the Royal Institution of Great Britain,

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LECTURE IV.

THE acid chyme, when it leaves the stomach, contains a large quantity of undissolved proteids, and of fat totally unacted upon; it also includes the starch that has remained unchanged by the action of the saliva, and undigested cellulose. It becomes mixed with the bile, which is to be regarded as an excretion to a great extent, and as a by-product of important actions going on in the liver. By its alkalinity it helps to neutralise the acid chyme, and thus to establish conditions favourable to pancreatic digestion; it usually contains no unformed ferment.

The principal remaining digestive juice is that afforded by the pancreas, which is one of the compound racemose glands, with a general resemblance to the salivary glands. Its tubular acini contain cells which in the fasting condition have very granular contents, together with an outer clear zone. When the gland has been in action for some time, after food has been taken, the contents of the cells are much less granular, and the clear zone increases in extent. The pancreatic juice is a secretion variable in quantity according as food has been ingested recently or not. It is almost *nil* during fasting, and becomes considerable almost as soon as food has entered the stomach. It attains a maximum about two hours after this time, being secreted in smaller quantities until about the sixteenth hour after food has been taken. It is markedly alkaline, the alkalinity being due to sodic carbonate, which is almost as important an ingredient here as hydrochloric acid in the gastric juice.

Pancreatic juice contains three if not four distinct ferments —pancreatic diastase, trypsin (a proteolytic ferment), a fat-decomposing ferment, often termed "emulsive" ferment, and also a milk-curdling ferment. The action of the diastatic ferment upon starch is exactly the same as that of salivary diastase, the ultimate product being dextrins and sugars (especially maltose.) This power is most important, seeing that in ourselves much starch arrives at the stomach unchanged, and in the herbivora the saliva is not diastatic at all.

Of trypsin, the proteolytic ferment, although it has not yet been prepared in a state of chemical purity, it may be said that it is not so exigent as pepsin in the conditions under which it acts. It will exert its transforming powers in a neutral, a very feebly acid, or in a decidedly though not very intensely alkaline liquid. Trypsin seems to cause more profound changes even than pepsin, for after the peptones are formed, some of them appear to split up further into leucine, $C_6H_{13}NO_2$, tyrosine, $C_9H_{11}NO_3$; the body indol, C_8H_7N, possesses a foul smell, which appears in the course of prolonged pancreatic digestion to be connected in its formation with the development of bacteria.

The administration of food which has already been partially digested by pancreatic ferments proves most valuable in certain cases, and relieves much suffering. This is to be noted in favour of pure scientific investigation, for when the experimental researches by which our knowledge of the action of the pancreas has been obtained were commenced, it was not at all obvious that they would lead to the relief of human suffering. The recent wide use of peptonised foods is not a little due to the researches in this direction of Dr. William Roberts, F.R.S., of Manchester.

To Claude Bernard is due the establishment of the fact that pancreatic juice emulsionizes and partially decomposes fats. Both pancreatic juice and minced pancreatic tissue are capable of emulsionising olive oil, which remains in the emulsified condition after standing many hours. The fats, as acted upon by pancreatic juice, are able to enter the lacteals of the small intestine. In an animal killed two or three hours after a mixed meal, the lacteals are found filled with a white liquid consisting very largely of emulsified fat. An argument drawn from comparative anatomy is of interest here. In the rabbit the pancreatic duct is not closely connected with the bile duct, as in many animals, but opens into the small intestine thirteen or fourteen inches below the bile duct; and, in correspondence with the function assigned to the pancreatic secretion, a rabbit killed some hours after a meal has milky chyle only in the lacteals of that part of the intestine below the entrance of the pancreatic duct.

Pancreatic juice further has a saponifying action upon neutral fats, decomposing them into glycerine and a fatty acid. This has been denied by some observers, but the failure to verify this action depends upon the readiness with which the fat-decomposing ferment of the pancreas is itself decomposed by acids. Therefore special precautions are requisite to prevent the destruction of this ferment in making experiments. The addition of a little carbonate of soda, to preserve the alkalinity, is necessary to retain the ferment in activity; otherwise it is killed or prevented from acting by the very acid which it forms. But under conditions which preserve the alkalinity of the digesting mixture, the saponification of fats under the action of pancreatic juice can be most satisfactorily observed.

There is, no doubt, a further ferment in the pancreatic juice, which has, like the gastric juice, the power of curdling milk or precipitating its casein. Thus, if to a neutral or even faintly alkaline emulsion of oil of sweet almonds and gum arabic there be added a sufficient quantity of a blue solution of litmus, and a few drops of a feebly alkaline, freshly prepared glycerine extract of pancreas, and the mixture be rapidly raised to the temperature of the mammalian body, the reaction changes almost instantly from alkaline to acid, as shown by the transformation of the blue colour of the mixture to red. This acidification of neutral fats by the pancreatic juice, which on many grounds is to be connected with an unformed ferment, is doubtless associated with the emulsifying powers of the pancreatic juice, though it is doubtful whether the ferment directly influences the emulsionising process as is implied by the term given to it by Claude Bernard of "ferment emulsif."

As to the absorption of the products of digestion, that subject does not formally enter into the present course; but it may be said, briefly, that water, soluble salts, peptones, and sugars are absorbed directly into the blood for the most part, while the fats enter almost exclusively into the lymphatics.

The lectures were illustrated not only by diagrams, but also by slides exhibited with the aid of the electric light, and by numerous typical and instructive chemical experiments.

AT the second diet of a Sheriff and Jury Court held at Dumfries last week a student of medicine was charged with culpable homicide, in so far as, on April 9th last, having been called to attend the wife of a hostler who was suffering from cramp in the stomach, he administered to her, by hypodermic injection, from twelve to fifteen minims of solution of morphia, whereby death resulted in about fourteen hours afterwards. A plea of guilty was tendered, but it was pleaded that the fatal consequences resulted from an unfortunate mistake. A fine of £20 was imposed, the alternative being a month's imprisonment.

ON DOCHMIUS DUODENALIS (SCLEROSTOMA VEL ANCHYLOSTOMA DUODENALE) AS A HUMAN PARASITE IN INDIA.

BY J. F. P. McCONNELL, M.B.,
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IN Professor Cobbold's recently published treatise on the "Entozoa of Man and Animals," pp. 212–16, a very interesting account is given of the observations made by Griesinger and Wücherer with respect to the geographical distribution and pathological importance of this small nematoid worm. It has been found "by Bilharz and Griesinger in Egypt; by Wücherer, Dr. Moura, Dr. Tourinho, and other physicians in Brazil; by Monestier and Grenet in the Comoros; and by Rion Kérangel in Cayenne." In commenting on "the wide separation of these several localities," Wücherer ventures to predict that "anchylostomes, if duly sought for, will be found in many other countries." This has already been verified in some parts of Europe, as, for example, the numerous instances reported of the infection by anchylostomes of workmen engaged in the St. Gothard tunnel; and as regards India, the present paper will prove that these parasites are far from being uncommon amongst natives—at least, amongst the natives of Lower Bengal. The description of the anatomical structure of the dochmius given by Cobbold[1] renders its identification easy:—"The males measure $\frac{3}{4}$", or rather more, whilst the females extend to very nearly $\frac{1}{2}$" (12 mm.). The head is pointed and tapering, and bent forward, having the mouth directed towards the ventral aspect. The oral opening is armed with four asymmetrically disposed, unequal-sized, horny, conical, converging teeth. The neck is continuous with the cylindrical body, which is $\frac{1}{30}$" in thickness. The body terminates in a straight cone-shaped, or rather sharply pointed, tail in the female, the caudal extremity of the male ending in a partially inflexed blunt point. In the male there is a cup-shaped, bilobed bursa, the membranes of which are supported by eleven chitinous rays, ten being simple, whilst the median, or odd one, is bifurcated at the summit. The mode of reproduction is viviparous. Adult males and females occur in the proportion of one of the former to three of the latter."

This description may be supplemented by certain particulars, the results of careful examination of numerous specimens in my possession, from which, also, the drawings in the accompanying woodcut have been made.

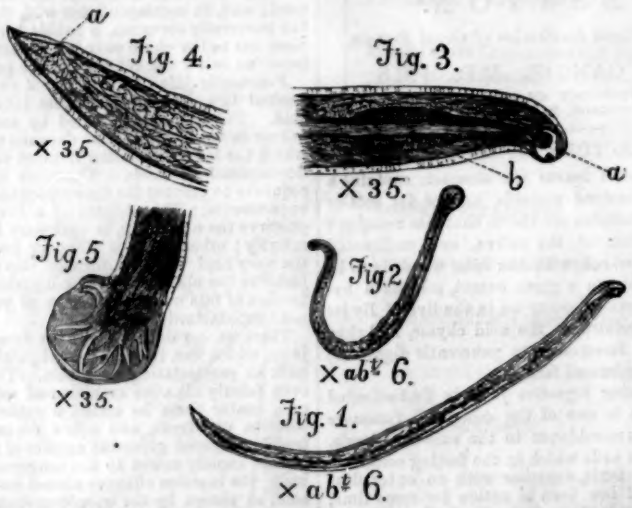

Fig. 1.—Female dochmius, × abt. 6. Fig. 2.—Male dochmius, × abt. 6. Fig. 3.—Anterior portion of female worm, × 35; showing the mouth (*a*) and the œsophagus (*b*). Fig. 4.—Posterior portion, or tail, of female, × 35, with termination of intestinal canal at *a*. Fig. 5.—Caudal bursa of male, × 35, with pronged chitinous rays, &c.

The average length of the female sclerostomata in my possession is $\frac{9}{12}$" (14 mm.), and of the males $\frac{7}{12}$" (11 mm.). The breadth of the former, at the thickest part (about the middle of the body) is about $\frac{1}{45}$"; of the latter, about $\frac{1}{75}$". The head is not strictly "pointed and tapering," but rounded or somewhat square-shaped, and abruptly truncated. The mouth (Fig. 3, *a*) is provided with three or four irregular, hard, horny teeth; it measures in the female $\frac{1}{150}$", in the male $\frac{1}{175}$". The oral orifice leads into a pharynx and bulbous œsophagus (Fig. 3, *b*), very distinct in both males and females, and measuring in the latter $\frac{1}{12}$" in length by $\frac{1}{117}$" in greatest width. The muscular structure of this portion of the alimentary canal is particularly well marked, and probably forms a powerful suction-apparatus. To the œsophagus succeeds a simple intestine, which terminates in an anal aperture a short distance ($\frac{1}{175}$") from the tail in the female (Fig 4, *a*), and on the under surface of the caudal bursal expansion in the male. The rest of the body of the worm is occupied by the reproductive tubules and glands, the former of which, especially in the female, have a highly convoluted outline, and very dark granular contents. The caudal bursa in the male dochmius measures about $\frac{1}{175}$" (Fig. 5). The chitinous rays which it supports vary in number from ten to twelve; the majority are double, like the prongs of a fork; one or two may be simple or solitary. This evidently constitutes a prehensile organ, and is the chief distinguishing peculiarity (apart from the difference in size) between the male and female sclerostome. Lastly, the body of the worm has a distinct double contour—a transparent interval of from $\frac{1}{1150}$" to $\frac{1}{1400}$" existing between the peripheral outline and the dark central structure of the parasite. This transparent portion is composed of muscular fibres arranged in very distinct tranverse bundles.

The first specimens of this nematoid observed by me in this country were found on January 6th, 1879, adhering to the mucous membrane of the jejunum of a native (Hindu) male, aged twenty-five, who had died in the Medical College Hospital from chronic dysentery. I mistook them for thread worms, though puzzled to account for their presence so high up in the intestine. On placing some of them, however, under the microscope, the distinctive peculiarities which separate them from the oxyuris vermicularis were readily recognised. Since this period I have met with sclerostomata in nineteen other bodies examined in the dead-house. In some only four or five worms, in others more than fifty were found in the bowel or its contents.

With respect to the pathological significance of this entozoon, Griesinger has described a form of "anæmic chlorosis" in Egyptians, and Wücherer a similar condition (under the designation of "hypoæmia") in Brazilian sub-

[1] Loc cit., p. 211.

jects, which both these observers attribute directly to the presence of these worms, and their action as "veritable blood suckers." More recently a similar *rôle* has been assigned to these parasites in connexion with the epidemic disease which proved so fatal to some of the workmen employed in the construction of the St. Gothard tunnel, and was referred to in an annotation in THE LANCET on April 3rd, 1880, p. 535, headed "Anchylostomosis." There is still, however, some difference of opinion with respect to this interesting question, and, for this reason, I have taken great care to record carefully the causes of death, and the presence or absence of anæmia in all the cases that have come under my own observation. These details, with others, are exhibited in the accompanying table.

TABLE OF CASES OF DOCHMIUS DUODENALIS IN THE HUMAN BODY, WITH NATURE OF DISEASE, PRESENCE OR ABSENCE OF ANÆMIA, ETC.

No.	Race &c.	Sex.	Age.	Disease.	Where found.	Anæmia present.	Remarks.
1	Native (Hindu)	Male	25	Chronic dysentery	Jejunum	Yes	Worms found adherent.
2	Native (Mahomedan)	"	18	Acute dysentery	"	No	Distoma conjunctum in bile-ducts of liver.
3	Native (Hindu)	"	—	Erysipelas	Duodenum and upper part of jejunum	No	One whipworm (trichocephalus) and one threadworm (oxy. vermicularis) found in large intestine.
4	" "	"	12	Malarial anæmia and exhaustion	" " "	Yes	No bowel lesion.
5	" "	"	40	Chronic bronchitis	" " "	No	" "
6	" "	"	30	Remittent fever	" " "	No	" "
7	" "	"	32	Malarial anæmia and dysentery	Free in contents of small intestine	Yes	" — "
8	" "	"	28	Acute cerebro-spinal meningitis	Jejunum	No	No bowel lesion.
9	" "	"	40	Dysentery	Jejunum and upper part of ileum	Yes	—
10	" "	"	25	Pneumonia	" " "	No	No bowel lesion.
11	" "	"	26	Traumatic tetanus	" " "	No	" "
12	" "	"	26	Cirrhosis of liver &c.	" " "	Yes	Small puncta where worms adhered.
13	" "	"	26	Morbus cordis	Duodenum and upper part of jejunum	No	Worms found adherent.
14	" "	"	35	Acute dysentery	Free in contents of small intestine	No	—
15	" "	"	30	Pyæmia after compound fracture of the foot	" " "	No	No bowel lesion.
16	" "	"	30	Cirrhosis of liver	Duodenum	No	" — "
17	" "	"	18	Dysentery and cirrhosis of liver	Jejunum	Yes	
18	" "	"	30	Acute dysentery	Duodenum and upper part of jejunum	No	Worms found adherent.
19	" "	"	20	Chronic dysentery	Jejunum and upper part of ileum	Yes	Worms found adherent, and when detached and placed in water, exhibited lively movements.
20	" "	Fem.	25	Chronic dysentery and splenic anæmia	Jejunum	Yes	Worms found adherent.

While anæmia was a prevailing element in nearly half (8 out of 20) of the cases in which sclerostomata were found, yet it seemed to me that this condition was, in these cases, more directly attributable to dysentery and malarial complications than to the presence of a varying number of these parasites; and, on the other hand, in more than half the number (12 out of 20) not only was there no anæmia, but a positive hyperæmic condition of almost all parts and tissues of the body, as is the rule in acute or sthenic diseases, such as pneumonia, erysipelas, cerebro-spinal meningitis, remittent fever, &c. Not only, therefore, was there no anæmic condition of parts discovered after death in the majority of these cases, but the very nature of the fatal diseases precluded the existence of this condition during life. Hence, while it may readily be conceded that in a certain proportion of the cases now reported the anæmia might partially be attributable to the depletion resulting from the presence of sclerostomata, in the majority their existence was not associated with this state; and, certainly, no facts in this connexion have hitherto tended to show that anything like a specific hypocemia or chlorosis occurs in the natives of this country, which can be traced even indirectly to this cause.

In no instance has blood in any quantity been found in the small intestine, and, except in dysenteric cases (and then usually with mucus and other inflammatory products), the same may be said with regard to the colon. A point or minute puncture is observed when an adhering dochmius is detached from the mucous surface of the bowel, and occasionally small red puncta in the duodenum or jejunum have indicated the site of attachment of these parasites, but more frequently the lining membrane of the intestine has been found quite healthy and free from all pathological changes. I have, hitherto, failed to find these worms in the evacuations during life, nor do I know of any specific symptoms by which their existence is to be diagnosed. My opinion is that their presence is to be regarded in the majority of cases as purely accidental, and their relation to any special disease a coincidence. The lower classes of natives in this country are by no means clean feeders or careful as to the quality of the water they drink, and hence are very frequently infected with intestinal worms, particularly the round worm. The presence of sclerostomata may be attributed to the same causes, and I am inclined to believe that the prevalence of these worms is not very much less common than that of the lumbricus in this class of individuals. It may here be mentioned that up to the present time all the cases in which I found these parasites have been natives, and, with one exception, males. This circumstance may perhaps be due to the fact that comparatively few bodies of native females are brought to the post-mortem room at the Medical College Hospital. In not a single instance has the worm been discovered in a European, Eurasian, &c. The first two of my cases (see table) show that the occurrence of sclerostomata is not incompatible with the existence of other entozoa in the same "host."

In conclusion, I would direct attention to the fact that in the majority of the cases these worms were met with in the jejunum, or even lower down the intestinal canal. In some instances this might have been due to the contents of the bowel being squeezed downwards before the latter was laid open; but in the majority this was not the case, the parasites being found adherent. This circumstance seems of some importance, since one of the specific names of the dochmius, or sclerostoma, is derived from a particular portion of the intestinal canal supposed to be its usual habitat.

THE Royal Commission on Metropolitan Sewage Discharge met on Tuesday at 20, Great George-street. There were present—Lord Bramwell, F.R.S. (in the chair), Sir John Coode, Professor A. W. Williamson, F.R.S., Dr. De Chaumont, F.R.S., Dr. Stevenson, Mr. James Abernethy, F.R.S.E., and Dr. W. Pole, F.R.S. (secretary).

THE QUESTION AS TO THE IMPORTANCE OF UTERINE DISPLACEMENTS.

BY GRAILY HEWITT, M.D., F.R.C.P.

THIS is a question which is not by any means settled or decided by the various statistical data which have been of late adduced on the subject, the latest of all being the statistics recently published in the *Archiv f. Gynæk.* (vol. xix., 1882) by Dr. Vedeler, and commented on in THE LANCET of June 24th. There are two methods of procedure in order to obtain conclusions as to the value or importance of uterine distortions and associated displacements.

A. One is to examine healthy subjects and ascertain the position and shape of the uterus. But it must be certain that these subjects are healthy and do not present symptoms which can be traced to the uterus. This implies an accurate and full knowledge of what the symptoms are which are traceable to disturbed or disordered conditions of this organ.

B. Another is to observe carefully the history, course, symptoms, and effects of particular changes in the uterus, and to procure numerical evidence as to the frequency of conjunction between the particular pathological change and the symptom and effect resulting therefrom. Further to test the effect of treatment capable of removing the pathological condition in also putting an end to the symptom or effect supposed to be due to it. This implies a long course of experimental observation of cases.

Dr. Vedeler's statistics—an attempt to solve the question by the *A* plan of investigation—by no means comply with the necessary scientific conditions. In the first place Dr. Vedeler starts with the statement that most gynæcologists over-estimate the importance of uterine displacements (implying a bias of judgment on his part to begin with). By a diseased condition, Dr. Vedeler understands that symptoms are complained of which can be traced back to the pelvic organs, or which point to organic changes. He, however, expressly states (though this was not mentioned in THE LANCET commentary on June 24th) that dysmenorrhœa is not included in these symptoms.

But it would appear that Dr. Vedeler must have excluded many other symptoms as well as dysmenorrhœa. It is to be presumed that the patients examined were really patients, and that they made some complaint sufficient to justify the making of the examination. Thus it is stated that 466 virgins were examined, and that of these 332 were found to have anteflexion of the uterus; of these 332 anteflexion (virgin) cases the uterus was found to be "sound" in 296 cases, and "diseased" in 36 cases. Now, it may be properly inquired how it happened that the 296 sound cases came to be examined. Dr. Vedeler appears to have found no inflammatory lesions in these cases; he only found the anteflexion. But he proceeds to draw the very remarkable inference that these 296 patients were "sound"; and his whole conclusions on other displacements, as well as anteflexions, are based on a similar foundation. Dr. Vedeler argues as if the 296 cases examined were "sound." The inference is that they were not so, or they would not have presented themselves for examination.

I have alluded to "dysmenorrhœa," which Dr. Vedeler (most erroneously, as I consider) excludes as a symptom of uterine disease. There is another class of symptoms of which he makes no mention, but from what I know of the subject I feel certain that very many of the 296 supposed sound cases presented the symptoms in question.

Having been at some pains to arrive at a knowledge of patients' views on the subject of "suffering" in cases of uterine disease, I have come to the conclusion that much misapprehension prevails in reference thereto. The fact is that patients complain in the large majority of cases of "sufferings" which are very often entirely passed over or considered trifling by those who investigate their condition. Leucorrhœa, dysmenorrhœa, menorrhagia, &c., these symptoms are generally noted, and very properly so, but the inconvenience, discomfort, or pain attendant on locomotion, which I have described as uterine "dyskinesia," is a symptom so generally to be noted in some form, and it assumes an importance so great in the estimation of the patient in very many instances, that it stands at the head of the list of symptoms due to uterine disorder in regard to its frequency and clinical importance. The connexion between this symptom and the various forms and degrees of uterine flexion and displacement is easily capable of substantiation by clinical data, and about the truth of this there can be no manner of doubt.

Nausea or vomiting is also a symptom very frequently constituting one of the "sufferings" of patients affected with uterine distortion. This symptom has much attracted my attention and investigation. Engelmann of St. Louis has expressed views on this subject identical with my own.

Taking these two symptoms, uterine dyskinesia and nausea or vomiting alone, and testing their connexion with flexion of the uterus, observing the marked effect produced by treating the flexion in removing the "sufferings" in question, a mass of evidence is adduced showing the great "importance" of the flexion in such cases. But it does not follow, nor logically would it be expected to follow, that all cases of flexion shall be attended with these symptoms. My contention is that these particular symptoms frequently exist and are overlooked, and before we can consider any individual with a flexed uterus as "sound," there must be clear evidence of absence of such symptoms. It by no means results, even then, that we shall be in a position to admit the "soundness," for further investigation may entirely disprove it.

In reference, therefore, to a vast number of cases considered by Dr. Vedeler to be "sound," so far as the uterus is concerned, it is necessary to inquire whether these supposed sound individuals complained of discomforts attending locomotion or of sickness. In all probability many of them did so complain, or would have done so had they been interrogated. Dr. Vedeler has himself excluded one set of symptoms, dysmenorrhœa, as he apparently does not consider this a symptom of uterine disease at all; and we are at present left to the conclusion that this symptom was present in some, at all events, of the cases which he classes as free from uterine disease. Until dysmenorrhœa is dissociated with uterine flexions—a dissociation which has not yet been effected, though efforts have been made in this direction—this mode of dealing with the symptoms in question renders Dr. Vedeler's statistics of little value as proving the conclusions he proceeds to draw from them.

I have in the foregoing remarks simply pointed out reasons for distrusting the scientific value of Dr. Vedeler's data. No doubt these data have a certain value, and truth will be advanced by a thorough sifting of the question. It will not, however, be found so easy as it has been supposed to be to account for clinical facts by ignoring the influence and importance of uterine distortions and displacements. Sterility, tendency to abortion, various serious reflex nervous disturbances—these and other clinical phenomena have also to be dealt with and satisfactorily explained.

Berkeley-square, W.

REPORT OF

ONE THOUSAND CASES OF SMALL-POX IN WEST HAM UNION HOSPITAL.

BY J. MOIR, L.R.C.P. EDIN.,
MEDICAL OFFICER.

THE Small-pox Hospital of the West Ham Union was opened for patients in February, 1877, and consequently has been now five years in operation. At first the accommodation was very limited, being only suited for 20 patients, in two small wards under one roof. This continued for two years, and during that time 493 patients were treated, and considering the limited space and conveniences very good work was done there. At the end of that time, by the death of the former medical officer, I succeeded to the appointment. The two old wards were immensely improved in every respect at considerable expense, and a year afterwards two new wards were built in separate blocks at right angles to the old wards, capable of receiving 30 more patients, 18 males and 12 females, experience teaching that the number of the former was greatly in excess.

I mention this chiefly to show that I do not myself claim credit for the very considerable reduction of the mortality in the second 500 cases as compared with the first, as the great

improvement in the hospital itself sufficiently accounts for that; and considering that of the 1000 cases rather more than 400 have been crowded into the last year, and rather less than 600 in the four previous years, with a remarkable reduction in the rate of mortality, it speaks well for the new buildings, and consequently increased staff, that they have done their work so well.

The following table shows the different districts of the West Ham Union from which the cases have been received, with the total number from each district, and includes 11 from another union, St. George-in-the-East, received last spring, but soon discontinued for want of room for our own cases.

TABLE I.

District.	No. of cases.
1. Canning Town	337
2. Stratford	222
3. Plaistow	199
4. Leytonstone	80
5. Walthamstow	44
6. East Ham	33
7. West Ham	31
8. Silvertown	16
9. St. George-in-the-East	11
10. Woodford	11
11. Wanstead	9
12. North Woolwich	5
13. Little Ilford	2
	1009

From this it will be seen that the parish of West Ham alone (which includes Canning Town, Stratford, Plaistow, West Ham, and Silvertown) has contributed 805 of these cases, all the other parishes in the union together only 184, and St. George-in-the-East 11. This is of course accounted for by its proximity to London and its completely urban character, the other parishes being chiefly, if not altogether, rural, and with a less population all put together than that of West Ham alone, which is now close on 130,000.

The mortality of the cases is shown as under :—

TABLE II.

First	100 cases	23 deaths
Second	,, ...	21 ,,
Third	,, ...	16 ,,
Fourth	,, ...	18 ,,
Fifth	,, ...	17 ,,
Sixth	,, ...	8 ,,
Seventh	,, ...	23 ,,
Eighth	,, ...	13 ,,
Ninth	,, ...	11 ,,
Tenth	,, ...	13 ,,
		163 ,,

From this table we see that the total number of deaths was equal to 16·3 per cent., and dividing them into two groups of 500 each for the reasons I have already stated, it will be seen that in the first 500 cases 95 died or 19 per cent., whilst in the second 500 cases 68 died, 27 less than in the first group, or 13·6 per cent.; this result, as will be seen from the table, is owing to the great mortality in the seventh hundred, chiefly, I believe, from unavoidable overcrowding, as many as fourteen admissions a week occurring, and the numbers in the hospital being for a considerable time over the accommodation, for two or three months in the early part of the year being as many as from 55 to 60, and on one occasion by making up a bed in my consulting room 61. Notwithstanding, the improvement is equal to 5·4 per cent., which is very gratifying. It will be also noticed that the number of deaths in the first hundred cases is the same as that of the seventh, 23, the one occurring in 1877, the other in 1881; that is to say, in each case at the beginning of an epidemic, when the cases are always worst. In the latter case I may say that four were brought in dying, and lived less than twelve hours after admission, eight were hæmorrhagic cases and all died, one was a case of primiparous tedious labour, and died from exhaustion forty-eight hours after delivery. I have little doubt the history of the first 100 cases is somewhat similar. In one case of labour which happened in the hospital the child was born alive and sent home, the mother recovered and left the hospital a month after, and is still in good health; the infant took small-pox twelve days after birth and died in three days.

The mortality is very greatly increased by the unfortunate and lamentable ignorance and prejudice respecting vaccination. I cannot help thinking that West Ham is exceptionally unfortunate in this respect, as will be seen from the following table showing the number of vaccinated, unvaccinated, badly vaccinated, and revaccinated (badly vaccinated being almost equivalent to unvaccinated).

TABLE III.

		Vaccinated.	Unvaccinated.	Badly vaccinated.	Revaccinated.
First	100 ...	70 ...	13 ...	15 ...	2
Second	,, ...	84 ...	12 ...	4 ...	0
Third	,, ...	78 ...	13 ...	6 ...	3
Fourth	,, ...	81 ...	9 ...	8 ...	2
Fifth	,, ...	81 ...	9 ...	7 ...	3
Sixth	,, ...	80 ...	9 ...	7 ...	4
Seventh	,, ...	73 ...	18 ...	7 ...	2
Eighth	,, ...	84 ...	11 ...	3 ...	2
Ninth	,, ...	82 ...	13 ...	3 ...	2
Tenth	,, ...	79 ...	10 ...	10 ...	1
		792	117	70	21
			1000		

Here we find that out of 1000 admissions, 117 were unvaccinated and 70 badly vaccinated, practically 187 were unprotected, which is a most alarming, and, as we shall see from the following table of mortality under each heading, a frightfully fatal state of matters as regards these unprotected cases.

TABLE IV.

Died in		Vaccinated.	Unvaccinated.	Badly vaccinated.	Revaccinated.	Total deaths.
First	100	9 ...	8 ...	6 ...	0 ...	23
Second	,,	15 ...	5 ...	1 ...	0 ...	21
Third	,,	6 ...	9 ...	1 ...	0 ...	16
Fourth	,,	13 ...	5 ...	0 ...	0 ...	18
Fifth	,,	14 ...	4 ...	0 ...	0 ...	18
Sixth	,,	3 ...	3 ...	1 ...	0 ...	7
Seventh	,,	8 ...	10 ...	5 ...	0 ...	23
Eighth	,,	5 ...	6 ...	2 ...	0 ...	13
Ninth	,,	6 ...	5 ...	0 ...	0 ...	11
Tenth	,,	5* ...	4 ...	3 ...	0 ...	13
		85	59	19	0	163

* And 1 small-pox and vaccination concurrently.

From this table, then, we find that from amongst 792 vaccinated 85 died, or a mortality of 10·7; of the 21 revaccinated none died, in striking contrast with the 59 deaths in the 117 unvaccinated cases, a percentage of 50·4, and of the 19 deaths in the 70 cases of badly vaccinated, a percentage of 27·1. Or if we take the 792 vaccinated cases and the 21 revaccinated, 813 cases with their 89 deaths, and compare them with the 117 unvaccinated and 70 badly vaccinated, 187 cases with their 78 deaths, we find a still stronger plea in favour of vaccination than any sentimentalism, prejudice, or ignorance can bring on the other side. In the case of the vaccinated, we find that the mortality is 10·4 per cent., in that of the unvaccinated 41·7 at best. This means a saving of 31 lives in every 100 in favour of the vaccinated. Nothing more requires to be said on this point, but I believe that efficient revaccination affords total immunity from *death* from small-pox, as the annals of the London and other small-pox hospitals conclusively prove. Some cause must have arisen to create such a lessened mortality from this disease as we find depicted in the Report for 1880 of Dr. Tripe of Hackney to the Local Sanitary Authority, and I agree with him that that cause can only be vaccination; revaccination would prove still more efficient. Dr. Tripe gives the following statement of the annual number of deaths from small-pox in London per 100,000 inhabitants :—

Before vaccination.		After vaccination.	
7 years 1629–35	189	10 years, 1871–80	45;
20 ,, 1660–79	417	or 8 years, 1873–80	17;
30 ,, 1728–57	436	—i.e., after the Compulsory Vaccination Act came into force.	
10 ,, 1771–80	502		

Or take thirty-three years of vaccination, 1839–1872, 40. Of course anti-vaccinationists may have some sort of answer to

these figures from the Hackney Report, but I fail to see what it can be.

That there should have been 21 cases of small-pox admitted into the West Ham Union Small-pox Hospital after revaccination may seem somewhat at variance with the above remarks; from Table III. it will be seen that 10 of these were in the first 500 cases, and 11 amongst my own cases. Of the first I cannot speak positively, but they were probably like my own; in only one case did I find eight good marks, in none of the others more than four marks, and in some only three. There is reason, then, to think that if the revaccination were genuine, which is highly probable, the primary vaccination must have been very bad, or not have taken at all, but I have no doubt that in all but one case the orignal vaccination was, to say the least of it, inefficient. Two cases were reported, one in each group of 500, to have had small-pox twice. This is doubtful, but I had a case of small-pox last summer in a child where the mother wished to be revaccinated along with the rest of the household; she is rather markedly pitted with small-pox, and said she had had it twice, twelve and eight years ago, and the pitting was caused by the first attack. I vaccinated her in three places, and they all took well. This is a remarkable instance of idiosyncrasy, which is occurring every now and again, and is difficult to explain, except by the great natural predisposition of certain people to certain diseases, and will account for some cases of small-pox, even after good revaccination; however, only one of my eleven cases was of that character, and in any case the whole twenty-one cases reported as revaccinated recovered.

In the following table is an abstract of the number of admissions and deaths of males and females under and over sixteen years of age; to those acquainted with union work this division will require no explanation.

TABLE V.

—	MALES.				FEMALES.			
	Under 16 yrs.	Died.	Over 16 yrs.	Died.	Under 16 yrs.	Died.	Over 16 yrs.	Died.
First 100	14	2	48	15	15	3	23	3
Second ditto	11	2	51	16	17	1	21	2
Third ,,	26	5	39	7	19	2	16	2
Fourth ,,	11	5	45	7	21	3	23	3
Fifth ,,	15	2	50	12	12	0	23	3
Sixth ,,	26	1	37	3	19	0	18	4
Seventh ,,	18	4	39	9	20	4	23	6
Eighth ,,	19	1	40	9	25	0	18	3
Ninth ,,	25	2	36	5	22	3	17	1
Tenth ,,	35	3	32	4	15	1	18	5
Totals ..	200	27	417	87	185	17	198	32

Total—1000 cases; 163 deaths.

The total number of the unvaccinated cases under sixteen years of age was 48, and over sixteen 69—total 117, of whom we have seen that 59 died. The admissions under five years of age were 45, ranging from two weeks old, not counting the infant born in the hospital where the mother had been admitted the week before with confluent small-pox. There were 5 cases over sixty, and 1 over seventy years of age. From this table it will appear that there were 200 cases of males under sixteen years of age with 27 deaths, being a percentage of 13·5. Over sixteen years of age 417 male cases and 87 deaths, being equal to 20·8 per cent. Amongst females under sixteen years there were 185 cases and 17 deaths, nearly 9·2 per cent., and of females over sixteen 198 cases and 32 deaths, being just about 16 per cent. Altogether there were in the 1000 cases 617 males and 383 females. Those under sixteen show a less mortality than those above sixteen years of age, and females considerably less than males in both classes, the ratio being 114 deaths amongst 617, a mortality of 18·4 per cent., whilst there were only 49 deaths amongst the 383 females, or 12·7 per cent.; or 3 male deaths to each 2 female deaths. The average mortality of the 114 male to the total of 163 deaths is 70 per cent., and the female 30. During the whole time the hospital has been opened and in the whole 1000 cases this proportion has remained pretty constant, and it would appear from the experience of this Union that females are less susceptible to small-pox and to death from small-pox than males are.

I have stated that the hospital was opened in February, 1877, and in the following table is shown the number of deaths in the 1000 cases for each month.

TABLE VI.

Monthly Mortality from March, 1877, to December, 1881.

—	1877.	1878.	1879.	1880.	1881.	Total.
Jan.	No patients	9	No patients	No patients	5	14
Feb.	,,	7	,,	,,	6	13
March	12	5	0	,,	5	22
April	6	4	2	,,	12	24
May	9	10	0	0	8	27
June	3	2	1	0	5	11
July	8	3	0	0	10	21
August	3	0	0	No patients	6	9
Sept.	4	0	0	,,	1	5
Oct.	5	No patients	No patients	,,	2	7
Nov.	3	,,	0	0	2	5
Dec.	2	,,	No patients	1	2	5
Totals	55	40	3	1	64	163

It will be seen from the above table that 1877–78 was an epidemic time for small-pox in West Ham, as there were 493 cases in hospital and 95 deaths. In the two years 1879–80, when I first took charge of the hospital, there were only 48 cases and 4 deaths; but in 1881 alone there have been 459 admissions and 64 deaths, the mortality being 13·9 per cent. for the year. From present appearances I am of opinion that the epidemic of small-pox, at least in West Ham, will run through another year, 1882, and I would strongly recommend as the only means of checking the disease the most efficient vaccination and revaccination; I should then have no fear of a successful result, and should feel certain of as great or greater immunity for West Ham Union than even in 1879–80.

ECTROPION OF BOTH EYELIDS OPERATED ON BY WOLFE'S METHOD.

BY G. H. HUME, M.D.,
SURGEON TO THE NEWCASTLE-ON-TYNE INFIRMARY.

IN the following case the plastic operation by transportation of skin from the cornea was tested under very unfavourable circumstances. In the upper eyelid the operation gave entirely satisfactory results. In the lower lid, though the operation was thrice repeated, the result in the end was only partially successful. The case therefore yielded opportunity for observing, on the one hand, the conditions which favour the success of the method, and, on the other, those which are apt to cause failure.

J. M——, a young woman aged twenty-four, was admitted into the Newcastle-on-Tyne Infirmary in March, 1881. Nine months previously the right side of her head and face had been severely burned. At the time of admission her condition was a very distressing one. The forehead had become covered by a thin cicatrix adherent to the bone. The skin of the temporal region had been destroyed and the raw surface was not yet quite healed. Across the infra-orbital region to the side of the nose and down to the upper lip the skin had in great part been replaced by cicatrix. The upper eyelid had been almost completely destroyed, so that the conjunctiva was everted and bound down to the supra-orbital ridge. The lower eyelid was also everted and attached to the bone. As a consequence of exposure of the eye destructive inflammation with ulceration of the cornea had set in, and appeared to be advancing rapidly. The ectropion of the upper lid was first operated on. In performing the operation the details given by Dr. Wolfe were scrupulously followed. The remains of the lid were freed from the bone, and the conjunctiva turned down so that the edge lay in contact with the everted edge of the lower lid. The margins of both lids were pared and stitched together with strong silk sutures. A pattern of the gap which had been made by freeing and turning down the conjunctiva was next taken with a piece of lint, and a piece of skin cut to the shape of this pattern, but somewhat larger, was raised from the forearm. This piece of skin was next prepared by carefully removing from it the subcutaneous tissue till the white surface of the corium was reached. It was then laid in posi-

tion and its margin stitched to the edge of the gap with fine silk suture. After being treated for a few seconds by the application of lint soaked in hot water, a dressing of several folds of warm water lint was applied, and both eyes were bandaged. The dressings were removed on the third day, the transplanted skin was then found to have changed its ashy-white dead appearance for a bluish-red hue. It had become adherent with the exception of a very small portion of its upper and outer edge. As the result of this operation a well-shaped eyelid was formed with complete correction of the conjunctival eversion. Under shelter of the new lid the condition of the eye rapidly improved. The inflammation subsided without treatment, and the corneal ulceration healed.

The patient was readmitted on June 29th to have the lower lid operated on. The proceeding was the same as in the upper lid, but it entirely failed. In October the operation was repeated, with the result that a portion of the flap adhered, producing a partial though decided improvement.

A third trial was made in December. On this occasion the lids were not stitched together; and in order to restrain movement as far as possible, and also to obtain exact contact between the surfaces, a piece of fine sponge was used as a dressing. On the third day the whole of the transplanted skin seemed to have become vitalised; subsequently suppuration set in around the margin, and led to the reparation of the greater portion. A part at the inner angle remained adherent, and seemed to some extent to reduce the eversion.

An explanation of the different results obtained in the upper and lower lid appears to be offered by the following considerations. The principle of the operation consists in the vascularisation of a piece of skin placed in a vascular, non-suppurating bed. It is essentially a process of primary union. That this should take place the necessary conditions are: the removal from the bed of all cicatricial tissue (tissue of low vitality); the removal from the flap of all subcutaneous tissue which would offer a hindrance to the advance of bloodvessels into the corium; and lastly, freedom of the part from movements which would interfere with the process of adhesion. In all points the conditions were favourable in the upper lid. Scarcely any part of the lid remained save the conjunctiva. When this was turned down the external surface of it formed a highly vascular bed, free from cicatricial tissue, and after the operation there was no difficulty in preventing movement. In the lower lid, on the other hand, it was impossible to remove altogether the bands of cicatricial tissue; and there were constant twitchings of the lid, which could not be restrained, and which appeared to be in great part the cause of the repeated ill-success of the operation.

NOTES OF A CASE OF
UNUNITED FRACTURE OF THE LEFT FEMUR; OPERATION; RECOVERY.

BY J. C. RENTON, M.B. EDIN., F.F.P.S. GLASG.,
EXTRA SURGEON TO THE DISPENSARY OF THE WESTERN INFIRMARY, AND ASSISTANT-SURGEON TO THE EYE INFIRMARY, GLASGOW.

J. M——, aged thirty-three, was admitted to the Western Infirmary on July 26th, 1881, and came under my care during the absence of Professor George Buchanan. In November, 1880, he had his left thigh bone broken by direct violence at Pitzburg, but no union took place, and he came to this country early in July, 1881. On examination the left femur was found to have a false joint in the middle third, giving the impression that there had been an oblique fracture, the upper end of the lower fragment being inside and posterior to the lower end of the upper fragment; the limb was two inches shorter than the right, but on extension it was only one inch, the two fragments could not be brought into apposition, the muscles of the limb were much atrophied, and no apparatus enabled the man to walk with any comfort. The following operation was performed on August 8th:—Having made an incision six inches long on the outer side of the limb, the broken ends of the bone were exposed, and were found covered by a cartilaginous material; bands of ligamentous tissue extended between the fragments, the lower one being fixed posteriorly by dense tissue. Half an inch was sawn off the fractured ends, which were turned outwards to enable the saw to be more easily applied, and the adhesions separated. The cut surfaces of bone could now be held in contact, but whenever the support of the finger was removed they slipped; to obviate this I drilled two holes with a surgical brace through the divided ends obliquely, and passed a steel peg six inches long and the eighth of an inch thick through the holes; this held the surfaces in contact. At one end of the peg there was a flattened head, which lay at the lower angle of the external wound, into which a drainage-tube was introduced, stitches applied, and Lister's antiseptic dressing used. The limb was placed in a box splint, specially made for the purpose, with an inside lateral splint.

Oct. 7th: The temperature has remained normal since the operation; the dressings were changed six times, the drainage-tube being removed at the fourth dressing, a fortnight after the operation, when the wound was found healed except at the upper and lower angles.—10th: The peg was found loose, and was removed, and as the patient could raise the limb from the bed, and on manipulation the bone seemed quite solid, the splints were not reapplied, but plaster-of-Paris bandages were used to form a firm case for the leg and thigh, and on the 19th the patient was dismissed. On measuring his limbs previous to departure, a difference of one inch was noted.

March 2nd, 1882: Patient now walks without any stick, and expresses himself as perfectly well.

Remarks.—Owing to the displacement in this case any simple subcutaneous operation would have been useless, so that it was decided to expose the broken femur, and either introduce two pegs, according to the method recommended by Dieffenbach, or to adopt the plan detailed above. The result fully justifies the somewhat hazardous procedure, and the entire absence of any constitutional disturbance is another illustration of the value of Lister's antiseptic method.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.
CASES OF ABDOMINAL SURGERY.
(Under the care of Mr. BRYANT.)

CASE 1. *Hydatid of Liver; Paracentesis twice; Relieved.* (Notes by Mr. Masters.)—Mary Ann L——, aged twenty-two, was admitted on Oct. 30th, 1881, into Lydia ward. The patient was married, and had had one child five months before. About three years previously she first experienced morning sickness and faintness as if pregnant, although at this time she was not married. About the same period she noticed a small hard lump in the right lumbar region; this gradually increased, and was taken for ovarian disease. In July, 1880, she was seen by Mr. Bryant, who, considering that she was only recently married, and that the enlargement might be due to hydatids, recommended that no operative interference should then be resorted to. On admission the patient was in good general health, and the tumour only caused mechanical inconvenience. Measurements: Ensiform cartilage to umbilicus, 7½ in.; left anterior superior spine to umbilicus, 8 in.; right ditto, 7½ in. On Nov. 4th she was placed under chloroform, which produced vomiting. It was then noticed that a fold of intestine floated over the tumour; it was therefore decided to puncture it. For this purpose an ordinary trocar and cannula were employed, and about twelve ounces of clear fluid were drawn off. With a probe passed through the cannula another cyst could be felt, and when punctured from the same opening a small quantity of fluid, not quite so clear as the first, was drawn off. The fluid, when examined after standing for three or four days, was found to contain some hooklets; these were seen in a field. On the 23rd, the size of the abdominal swelling having increased, a third cyst was punctured, and with an aspirator

fourteen ounces and a half of tolerably clear fluid were drawn off. On the 28th the patient left the hospital. The swelling was entirely gone, and the two sides of the abdomen were about equal. There was normal resonance where the swelling had been. Her general health was good.

CASE 2. *Contused Abdomen; Hæmorrhage into Iliac Fossa; Cure.* (Notes by Mr. Gard.)—Emily C——, aged eight, was admitted into Lydia ward on January 2nd, 1882. On December 26th she was walking in the street when she came in contact with the handle of a barrow. The blow was said to have been across the abdomen. She was sick once or twice in the night and complained of great pain. Opening medicines were given and hot fomentations were applied. She seemed to derive benefit from this, but on January 1st she was very ill all day and was unable to stand upright. She consequently applied at the Hospital. On admission, seven days after the accident, there was great fulness in the right iliac fossa. The abdomen was not swollen. There was no pain on pressure of any part of the abdomen, and only a slight abrasion could be seen on the outer side of the right thigh. An ice-bag was applied and milk diet ordered. On January 11th there was still to be felt in the right inguinal region a swelling deeply placed and apparently in connexion with the deep tissues. This swelling was much larger and was considered by Mr. Bryant to be an effusion of blood into the abdominal cavity. There was now a little discolouration of the abdominal wall; no tenderness; no sign of fracture of ilium. On Jan. 12th there was very slight discolouration. The patient had been upon milk diet. No pain on pressure. The swelling in the right inguinal region could still be felt, but it had lessened. Six days later she was discharged convalescent.

CASE 3. *Ruptured Small Intestine, followed by slight Collapse; Death in twenty-five hours.*—Abraham C——, aged forty-five, was admitted on Dec. 3rd, 1881, into Accident ward. At 7.30 A.M. he was lifting a bag of cement weighing about two hundredweight to another man's back, when he slipped and fell about four feet, with the sack upon his abdomen. He was taken to the hospital in a cab. On admission his pulse was feeble, but he was not much collapsed; he felt sick, and laid with his legs slightly flexed upon his abdomen; his abdomen was tender on pressure; he passed water free from blood; his bowels were not opened. He was put on milk diet. At 5 A.M. the next morning his breathing became hurried, and he was almost pulseless. The dresser was called, and found him much collapsed and the body cold. His breathing became more difficult, his legs more flexed, and he died at 8.30 A.M., twenty-five hours after the accident.

Necropsy, thirty-two hours after death.—The lungs were gorged with blood; there was hypostatic pneumonia in both lungs, and post-mortem staining of the trachea and of the breast. The heart was normal. There was matting together of the intestines, chiefly in the left iliac fossa. Fourteen feet from the cæcum the bowel was ruptured for two inches, and a rupture of one layer of the mesentery over about two square inches, and ecchymosis beneath the mucous layer of the intestine at the same spot. The right kidney was small and fatty, and weighed 3½ oz.; the left was normal, and weighed 4½ oz.

SHEFFIELD GENERAL INFIRMARY.

CASE OF ECTROPION SUCCESSFULLY TREATED BY TRANSPORTATION OF A LARGE NON-PEDICLED FLAP FROM THE ARM.

(Under the care of Mr. SIMEON SNELL.)

WALTER B——, aged twenty-one, first came under observation at the infirmary in the early part of November, 1881. He stated that eight years ago an abscess had formed on the right side of the face and orbit. For this he was treated at the infirmary; and a short time after another abscess formed underneath the eye; and still later others appeared on the forehead and upper eyelid. Six months subsequently Mr. Laver (house-surgeon) removed from the external and upper angle of the orbit a portion of bone about the size of a finger nail. The wound healed; but the right upper eyelid became fixed and drawn upwards, leaving the eyeball exposed. The patient attributed the abscess on the face to a blow from a cricket-ball he had received in that region. He further stated that inflammation was constantly attacking the exposed eye, and latterly it had commenced to ulcerate.

The patient was decidedly a scrofulous subject, and on both sides his neck was marked by irritable-looking scars, resulting from suppurating glands. He had also family history of struma.

With respect to the ocular condition it was found that the right eyelid was completely drawn up, and fixed to the bony margin of the orbit at its outer part, exposing the palpebral mucous membrane, which was reddened and hypertrophied. No effort on the patient's part could in any way make the lid cover the globe, and as a result of this exposure well-marked ulcerations of the cornea at its outer part was present. Underneath the integument on the side of the face, and round the margin of the orbit, prominent spiculæ and irregularities of bone were easily detected.

Before operation.

Operation for the relief of this deformity was not only desired by the patient for appearance' sake, but was rendered necessary by the peril the eye was in from its want of the protection afforded by the lid. Mr. Snell operated in the following manner:—On Nov. 21st, 1881, an incision was first carried through the integument between the margin of the upper eyelid and the edge of the orbit, and continued in such a manner that the lid fell easily into its normal place without dragging. The edges of the lids were now at two different points vivified and united by sutures to retain the upper one in its new position. The raw surface thus left on the surface of the lid measured one inch and a quarter in length and three-quarters of an inch in breadth. To fill this, after all bleeding had ceased, a large flap, measuring when mapped out two inches by one inch and a half, to allow for shrinking, was taken from the skin on the inner side of the left arm. This, after all the subcutaneous tissue had been carefully removed from its under surface and leaving only the integument, was found to easily fit the wound on the outer side of the upper eyelid. It was then secured by four or five fine sutures and covered with lint wrung out in warm water, over which gutta-percha tissue was placed. The dressings were allowed to remain undisturbed for forty-eight hours.

It will suffice to say that then the new piece of integument looked well and continued to appear so for the first six or seven days. It had become flattened down and its edges fastened to the margins of the wound, except at one point above, where there was a small spot of separation. At the end of the period mentioned, however, at the upper part it assumed a dusky appearance, and almost two-thirds or one-half of the flap sloughed. The remaining portion appeared quite healthy, and from it granulations spread out, but to prevent the possibility of the result of the operation being spoilt a minute dermic graft was placed between it and the upper margin of the wound.

It may be added that one of the points of adhesion between the lids gave way on removal of the sutures some days after the operation; the other portion firmly united,

and was allowed to remain for some considerable time during the cicatrisation in the upper lid to counteract any tendency of the lid being again drawn up.

After operation.

The result in this case has been in every way satisfactory; and the lad was exhibited before the Sheffield Medico-Chirurgical Society on Feb. 23rd, 1882. He then possessed a good upper eyelid, and, not only was the appearance of the two eyes rendered alike, but it afforded a good protection to the globe, and the corneal ulceration has for some time healed.

Mr. Snell remarked that the operation here performed was that suggested by Lawson and Wolfe, and which has now been adopted by many operators. The method presented the manifest advantage that, if failure occurred, the patient was in no worse a condition than before the operation was undertaken, and opportunity could be still afforded of treating such a case by transplanting a pedicled flap from a neighbouring region. In the present instance, the patient was a most unfavourable subject for operation. Enough of the flap, however, lived to make an excellent cure; and in a more healthy man there is little doubt that the whole of it would have survived.

The engravings, from photographs, well show the condition "before," and some time "after," the operation.

Medical Societies.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Annual Meeting.—Election of Officers.—Miners' Nystagmus. — Homonymous Hemianopia with Paralysis of Centres for Upward and Downward Movements of the Eyes.—The Movements of the Eyelids in Association with the Movements of the Eyes.—Micrococci in the Interior of the Eyeball.—Tests of Vision best adapted for Service at Sea.—Acute Glaucoma caused by the use of Atropine and cured by Eserine.

THE annual general meeting of this Society was held on the 7th inst., G. Critchett, Esq., Vice-President, in the chair. Mr. Streatfeild, the hon. treasurer, having read his report of the financial condition of the Society, the chairman delivered a brief address, in which he referred to the position of the Society, its proceedings during the past year, the share taken in them by the provincial Fellows, and the proposals to increase the facilities for the candidature of colonial practitioners. A resolution respecting the last-named subject was submitted to the meeting, and was unanimously approved. It was also resolved in future to hold seven ordinary meetings annually, the last two to be held on "the first Thursday in June," and "the Friday following the first Thursday in July."

During the evening the ballot was taken, and the following gentlemen were elected to serve on the Council for the ensuing year:—President: William Bowman, F.R.S., LL.D., &c. Vice-Presidents: George Critchett; W. H. Broadbent, M.D.; C. E. Fitzgerald, M.D. (Dublin); Henry Power; Frederick Mason (Bath); Augustin Prichard (Clifton). Treasurer: J. F. Streatfeild. Secretaries: John Abercrombie, M.D.; E. Nettleship. Other members of Council: James E. Adams; Edwyn Andrew, M.D. (Shrewsbury); W. A. Brailey, M.D.; R. Brudenell Carter; W. R. Gowers, M.D.; R. Marcus Gunn; C. Higgens; George Lawson; Stephen Mackenzie, M.D.; Charles Macnamara; J. Vose Solomon (Birmingham); T. Shadford Walker (Liverpool).

Dr. OGLESBY of Leeds contributed a paper on "Miners' Nystagmus," in which he contended that this disease was due to organic cerebral changes which were at first temporary but finally became permanent; these changes were induced by venous engorgement consequent on the constrained position in which colliers were obliged to work. He endeavoured to support this theory by citing cases in which nystagmus was associated with epilepsy. He found that the movements remained in abeyance when the patient was erect and at rest, but returned at once on assuming the attitude of a miner at work. The attacks of epilepsy (petit mal) only came on, he believed, when the nystagmus had been in existence for some time. He did not think that errors of refraction had anything to do with the causation of the disease. In one case only had he found treatment by drugs do any good. In this case the nystagmus ceased after strychnine had been taken for six weeks.—Mr. NETTLESHIP said that from replies to queries he had addressed to practitioners in mining districts it appeared that nystagmus is almost confined to coal miners. Thus Dr. Hudson of Redruth writes that he never sees nystagmus among the Cornish miners except in those who have come from the coal mines in the north, and after a time they lose the affection. Dr. Evan Jones of Aberdare believes that miners' nystagmus is due to the combined influences of foul air, insufficient light, and straining of the sight in coal mining. Dr. Thomas of Swansea connects it with injuries to the head.—Dr. BRAILEY thought the evidence of central lesion was very slight, and attributed the nystagmus to weakening of ocular muscles from working in a constrained position and in a dim light. Nystagmus can be induced by looking constantly in one direction, and therefore it was a "fatigue" disorder.—Dr. S. MACKENZIE remarked that Dr. Hughlings Jackson believed nystagmus to be allied to writer's cramp.—Mr. SNELL of Sheffield had seen many cases of miners' nystagmus, and had never met with any evidence of organic disease. He coincided in the view expressed by Dr. Brailey, and pointed out that the coal miner has mostly to work lying on his side, so that he has for long periods to look obliquely, producing fatigue of the muscles. Internal remedies and galvanism do very little for the affection; but nearly all cases are curable by the man leaving off pit work, as Dr. Bell pointed out some years ago. He had never noticed any ophthalmoscopic appearances indicative of congestion. The best means of diagnosis was to get the individual to look downwards.—Dr. GOWERS pointed out that the same influences might excite nystagmus and epileptiform seizures without the same lesion being present in the two instances. It was difficult to draw the line between muscular fatigue and fatigue of the centre. If nystagmus be due to muscular fatigue, it was difficult to explain why it recurred on the patient assuming a certain posture.—Mr. MCHARDY had observed in some cases that the nystagmus was absent unless the patient looked above the horizontal line; so that many miners do not apply for relief until the condition is advanced. Dr. Priestley Smith devised a simple means of testing the degree of nystagmus by noting the different angles above the horizontal line at which the man could look without becoming giddy; and improvement was marked by increasing power to look above this line.—Mr. NETTLESHIP said that Mr. Ogleaby in his paper states that nearly all the miners told him that they first noticed the symptoms when looking upwards.

Mr. LANG and Dr. W. A. FITZGERALD communicated a paper on a Case of Homonymous Hemianopia with Paralysis of Centres for Upward and Downward Movement of the Eyes; recovery, leaving Homonymous Insular Scotomata.

The patient was a man, aged forty-two, previously healthy, and presenting no signs of cardiac or renal disease, or of diabetes. When seen, three days after an attack of faintness and giddiness, without hemiplegia or loss of consciousness, there was total paralysis of upward and almost total of downward movement. No ptosis, but the lids did not move upwards when he endeavoured to look up, though they accompanied the slight downward movement of the eyes to a corresponding extent. Associated lateral movements, convergence, pupillary reaction, and accommodation normal; no diplopia. There was left homonymous hemianopia. A week later the movements of the eyes and lids had been partly restored, and the fields were normal, both for white and colours, except for the presence of insular negative defects at corresponding positions in each field, downwards and to the left. Four days later the movements were perfectly normal, and vision was with the right eye $\frac{20}{20}$ and Jaeger 1, and with the left $\frac{20}{20}$ and Jaeger 1. The condition has since remained unchanged in every respect.

Mr. LANG and Dr. W. A. FITZGERALD also communicated a paper on the Movements of the Eyelids in association with the Movements of the Eyes. They contested certain conclusions arrived at by Dr. Gowers, who believes that the movements are due to the fact that the lids are closely moulded to the globes, the edges of the upper and lower tarsal cartilages fitting into the "sclero-corneal sulcus." The authors endeavoured to show that this explanation is not correct, by pointing out that the movements still continue if the lower lid be withdrawn from contact with the globe, or if the eye be reduced to a mere stump. They described a fascia which connects the inferior tarsus with Tenon's capsule, and which explains the downward movement of the lower lid on looking down, and called attention to the close connexion between the upper and lower lids at the inner and outer canthus, the result of which is, that whatever depresses the lower must also depress the upper, and, conversely, whatever elevates the upper must also elevate the lower lid. The relaxation, or rather inhibition, of the levator, which is necessary in order to permit the descent of the upper lid, is, in Dr. Gowers' opinion, probably due to a reflex action set up by contraction of the inferior rectus, or by stretching of the fibres of the levator by the movement of the globe. This the authors endeavoured to disprove by quoting cases in which both upper lids descended normally on looking down, although the inferior rectus on one side was paralysed, and the globe motionless, and they suggested that the phenomenon was owing to the existence of associated centres for the movement of eyes and lids together.—Dr. GOWERS thought the authors weakened their case by affirming a universal negative to their assertion that it was impossible, under any circumstances, that the sclerotic and cornea can move the eyelids. The sclerotic bulges forwards the lower lid in looking upwards; and his explanation of this was that, besides the simple rotation of the eyeball on its own axis, there is an actual movement forwards of the globe. If this be so, it would be more easy to understand that the prominence of the sclerotic should move the lid. The authors' statement that the downward movement of the lower lid is effected through the connexion of the inferior rectus with Tenon's capsule did not accord with the fact that the movement of the lid takes place at the commencement of the rotation of the eyball, when, on their theory, the movement should be at its minimum. The movement of the lower lid is a rotation on its attachments at the canthus. At any rate, he had not observed any movement of the canthi. If there were any real movement, it should be greatest at the latter part of the lid movement, instead of the early part. If, on the other hand, the movement of the lid be due to the pressure of the sclerotic, the increased degree of movement at the latter part of the period would be explained by the increasing resistance. In the cases he had described in his paper in the Medical and Chirurgical Transactions, there was no reason to believe the paralysis was central; one was a case of total paralysis of the third nerve trunk of one side. More observations were required. Similar objections as to the movement beginning at the canthus applied to the descent of the upper lid, and it was difficult to see how the slighter movement of the lower lid could influence the greater movement of the upper. In facial paralysis the movement of the lower lid may be very variably affected, the differences depending on the degree to which it falls away from the eyeball. In young persons, where there was more elasticity of tissues, the impairment of the lid was very slight, as compared with old persons where there was loss of tone. When in paralysis of the orbicularis the eyelid is kept in apposition by its elasticity it moves with the eyeball.—Mr. COUPER said that Dr. Gowers' suggestion that there is a forward movement of the eyeball was new; he thought it was proved by Graefe that all its movements were round an axis. In support of this Mr. Couper mentioned the case of a persistent opacity in the hyaloid canal, where a spot of the string in the vitreous behind the lens could be seen to remain stationary in all movements of the globe, whereas the portions of the string in front of that point varied in position with the cornea.—Mr. HORROCKS had never found the fibrous expansion from Tenon's capsule described by the authors of the paper. If the upper eyelid be gently raised mechanically the lower lid is quite stationary; and if the lower lid be moved away from the eyeball there is not the slightest movement when the eye moves downwards. He asked whether the authors had seen cases of paralysis of the superior or inferior rectus only.—Mr. LANG, in reply, attributed the bulging of the lower lid to the fat in the lower part of the orbit coming forward in contact with the skin. The reason why the chief movement of the lid occurs at the beginning is because its area of movement is limited. Tenon's capsule is a layer of connective tissue separating the fat from the globe. If in the dead subject the lid be pulled away from the globe and, the orbit being opened from behind, traction be made on the inferior rectus, the lid makes a movement backwards. Again, if during life there be no globe in the orbit the movement takes place just the same. The case of paralysis of the superior rectus was under Mr. Nettleship's care; it was not seen by the authors of the paper.

A short paper, by Mr. JAS. F. RUDALL of Melbourne, upon Micrococci in the Interior of the Eyeball, was read by the hon. secretary. The eye had been destroyed as the result of a neglected gonorrhœal ophthalmia, and was accordingly enucleated by the author. The cornea had ulcerated away; the lens was absent; and the iris adhered to the remains of the cornea by granulative material in which micrococci were found. Similar organisms were also found in the optic nerve; but it was doubtful whether they had not been accidentally introduced during preparation.

Dr. W. A. BRAILEY read a paper upon Tests of Vision best adapted for Service at Sea. After referring to the practical importance of defects in sailors in distinguishing form and colour, and the frequency with which such defects might be presumed to be present, the author stated that there was no test of sharpness of sight for form for either officers or sailors of the British mercantile marine; and that the examination for colour vision, which applied to officers only, was very imperfect. The Board of Trade, however, had made one step in advance when, about two years ago, it refused to admit to his first step as officer anyone failing to pass the colour examination. He thought the best course would be to create a superior class of sailors, who should occupy responsible positions as "look-out men" and helmsmen; such a class already existed in the French Navy. The tests recommended by the International Medical Congress were the best with slight modifications; he advocated the use of coloured spots viewed by reflected daylight, and coloured glasses of transmitted artificial light on the principle of Donders. Dr. Brailey concluded by describing a modification of Donders' lamp, which he found more convenient, and made some suggestions with regard to ships' lights.

Mr. SIMEON SNELL of Sheffield related a case of Acute Glaucoma caused by the use of atropine, and cured by eserine. The patient, a lady, aged thirty-five, consulted him on May 15th last. The right eye tension was +2, the vision equal to fingers, and the pain intense. The attack had commenced on the 13th, she having on the 9th consulted another surgeon elsewhere, who, in order to test her refraction (high degree of hypermetropia), had ordered strong atropine drops to be frequently applied until next day. Iridectomy was declined, and eserine was therefore employed in form of "discs," followed by almost immediate relief of pain, lessening the tension to normal, and in a short time restoration of perfect sight. The patient complained also of discomfort in the left eye, "coloured rings," and some increase of tension; eserine afforded relief to this eye also. The gentleman who first saw the patient asserts the absence then of any indication of glaucoma; on the other hand, the patient mentions symptoms which appear like the prodromata of the affection.

The following cases and specimens were shown to the

meeting:—By Mr. Nettleship: Case of Recovery from Multiple Growths in the Iris. One eyeball, which had been the seat of such growths, had been removed (see Ophthalmological Society's Transactions, p. 19). The growths on the remaining eye subsequently disappeared under iodide of potassium; but there was no evidence of syphilis. By Mr. M'Hardy: (1) Sequel to a case of Retinitis following injury to the head; (2) Spectroscopic Analysis of a Black Cataract. By Dr. S. Mackenzie: Microscopical Preparation of Retinal Hæmorrhages in Pernicious Anæmia. By Mr. H. Juler: Extensive Central Choroiditis in a Hypermetrope, aged twenty-two, with history of syphilis. By Dr. Brailey: (1) A peculiar form of Cyclitis, pigmented fibrinous exudation occupying a portion only of the internal (vitreous) aspect of the ciliary body; (2) Cyst-like Detachment of the pars ciliaris retinæ; (3) Colour Chart of Magnus and Joy Jeffries, consisting of nine rows of coloured discs, each row containing five shades of the colour.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on July, 5th, 1882, Dr. Matthews Duncan, President, in the chair.

Extra-uterine Gestation.—Dr. DALY exhibited a specimen of tubal gestation, in which rupture of the cyst had taken place in the third month. The patient lived four days after the rupture. The nature of the case was diagnosed during life, and the question of opening the abdomen discussed, but decided against on account of the collapsed condition of the patient. Douglas's pouch was aspirated, and eight ounces of blood drawn off. On autopsy, about two pints of blood were found diffused in the abdomen, but no peritonitis.—Dr. WILTSHIRE advocated prompt operative interference in cases of internal hæmorrhage from ruptured tubal fœtation, or rupture of varicose veins in the broad ligament, especially where, as in this case, the diagnosis was reasonably clear.—Mr. LAWSON TAIT agreed with Dr. Wiltshire. In case of doubt an exploratory incision would settle the diagnosis, was safe, and more satisfactory than tapping.—Dr. ROUTH observed that a decidua was present. By dilatation of the cervix, the presence of such decidua might be ascertained and the diagnosis in a doubtful case settled.—Dr. CARTER thought operative interference advisable in these cases. The specimen showed how easily the cyst might have been removed.—Dr. CHAMBAZIAN (Paris) described the case of an actress who died in Paris from rupture of an extra-uterine gestation so suddenly that poisoning was suspected. In such a case no operation could have been performed.

Removal of the Uterine Appendages.—Mr. LAWSON TAIT showed fifteen specimens of Uterine Appendages removed by him since December, 1881, for hydro- or pyo-salpinx. The symptoms were pain aggravated by walking, by marital intercourse, and at the menstrual period. Five cases were due to gonorrhœa, and four either due to, or aggravated by, pessaries. In most the operation gave immediate and complete relief; in all there was improvement; none had died. He objected to the terms "spaying," "castration of women," "normal ovariotomy," because they implied that healthy ovaries were removed, an operation which he had never done. He thought the operation of doubtful value in neurasthenic cases; of these he had only done four, and at present was not disposed to go farther. For myoma its mortality was less than that of lithotrity in the male, and its results more certain. For the class of cases from which the specimens exhibited were taken, it was the only means which offered a hope of relief.

Uterine Tumour.—Dr. CARTER showed a Uterine Tumour weighing sixteen pounds and a half removed by him. The pedicle had been secured by Kœberlé's serre-nœud.

The Relation of Backward Displacements of the Uterus to Painful Menstruation.—A paper on the above subject by Dr. HERMAN was read. It was admitted that there were cases of backward displacement of the uterus, accompanied with dysmenorrhœa, in which the menstrual pain was relieved when the uterus was elevated and straightened. The author found, from his own experience, and that of others, that such dysmenorrhœa was slightly commoner with retroflexion than with retroversion. The object of the paper was to inquire into the explanation of these facts. Three theories had been advanced to explain them. *a.* That the dysmenorrhœa was due to narrowing of the canal at the point of flexion, and consequent obstruction to the outflow of menstrual blood. The author pointed out that there was anatomical evidence that the uterus might be bent to any extent without causing any hindrance to the escape of menstrual blood; that there was no anatomical evidence that flexion ever obstructed the canal, except when the uterus was fixed by adhesion, or its wall thinned by senile atrophy; and that this theory did not explain clinical facts. *b.* That the dysmenorrhœa was due to congestion from strangulation of vessels at the point of flexion. The author found no anatomical evidence that any such strangulation ever occurred; and said that the theory did not explain clinical facts. *c.* That the dysmenorrhœa was due to congestion produced by the pressure of the utero-sacral ligaments upon the veins running in the broad ligaments. The author found that the disposition of the parts concerned was such as to permit such pressure; that one case had been recorded in which there was anatomical proof that such pressure had actually occurred; that this theory was therefore supported by anatomical evidence; and that it explained clinical facts. The author's general conclusion was the following: "That while dysmenorrhœa accompanying retroflexion is often, it may be generally, dependent upon other concomitant conditions, yet that there are cases in which it is simply the result of the displacement, and that in such the dysmenorrhœa is probably entirely due, not to the flexion, but to the veins of the broad ligaments being compressed against the utero-sacral ligaments."—Dr. HEYWOOD SMITH thought that the symptoms accompanying retroflexion were generally due to other concomitant conditions, the flexion only in the minority of cases causing symptoms. The constriction at the point of flexion was apparent only, not real. In one case he had divided per rectum the utero-sacral ligaments; a low form of peritonitis followed, but the uterus had since remained in the normal position.—The PRESIDENT said that Dr. Herman had finally disposed of two great and unduly prevalent errors. The first was that in flexion of the uterus there was a projecting spur, or stricture, obstructing the passage of blood or fluid; the second was that behind the imaginary obstruction the uterine cavity was dilated. Much of the reasoning, both in this paper and in the one discussed at the last meeting turned on pain. Pain was too ill-defined a term to be wisely made the basis of conclusions; we had no good means of measuring its degree or kind, and nothing was more wanted. One woman would call excruciating what another would speak of as trivial. The utero-sacral ligaments could in many women be felt by the finger. Descent of the uterus so as to be grasped by the utero-sacral ligaments was a rare event. Ever since the paper of Dr. John Williams which had pointed out their action, he had attended to this matter clinically; but his observations had yielded him nothing of sufficient importance to lay before the Society.—Dr. HERMAN said it was impossible to avoid reasoning from pain; and he thought that errors due to the incorrect statements of a few individual patients became neutralised by taking a large number of cases. He did not think that the cases in which the utero-sacral ligaments caused congestion of the uterus were more than a small minority.

Rebiews and Notices of Books.

Hospitals; their History, Construction, and Hygiene. By J. F. SUTHERLAND, M.D. Edin. Edinburgh: E. and S. Livingstone. 1882.

THERE are so few English works which treat the question of hospital construction and management in a comprehensive manner, that every addition to the list is welcome, for there is no branch of practical medicine in which the profession as well as the public, stand in greater need of instruction.

The work of Dr. Sutherland is the graduation thesis of the year of his doctorate, to which a gold medal was awarded. Although it contains nothing new or original, does not deal exhaustively with any branch of the subject, and omits much that is necessary to its right understanding, it is a creditable performance. The author has collected and grouped with care and discrimination the leading facts and principles now accepted regarding the structural arrangements, ventilation, warming, lighting, and the other conditions to be observed in the location and building of hospitals,

as well as the proper means of dealing with the accessory agencies essential to their effective working; and has, in our opinion, correctly apprehended what the Germans have termed the "new view," in this all-important matter.

The most original portion of the work is that devoted to the Hertford Hospital in the immediate neighbourhood of Paris, of which Dr. Sutherland was, we believe, the first house-surgeon. It was built and endowed by Sir Richard Wallace for the sick and hurt of his own nationality in the metropolis of France. An accurate and detailed description of it appears in our issue of the 1st inst. It is a bijou institution, elegant in design and excellent in execution, and is said to contain "all that man could suggest, and money procure." This shows it to be unfitted for imitation and guidance in the construction of larger institutions of the same character, even were elaborate ornamentation and costly material essential—which they assuredly are not—to the successful treatment of disease, in buildings intended for the relief of sickness and its attendant dangers. The cost of the building is not given; it is reported to have been £40,000, which, if correct, would entitle it to rank, calculated on the number of beds it contains, with the new Hôtel Dieu and St. Thomas's Hospital in extravagant expenditure. In the present instance, however, there was full justification for the outlay, as it is designed to serve as a personal memorial, and is an undeniable proof of the splendid liberality of its founder. Having seen the hospital ourselves, and examined its arrangements, which are as perfect as a piece of marquetry in material and workmanship, we are by no means sure that it is as well adapted for its special uses as if it were more simple in design, and less artistic in execution. It must be placed in the same category with the elegant little hospital for scrofulous children built and maintained by the Rothschilds at Berck-sur-Mer, as a magnificent testimony of the wise uses to which great wealth can be devoted; yet how far short do they fall of the benefits derivable from the grand and enduring work of the self-denying bookseller, Guy!

It is to be regretted that in so manageable an institution as the "Château Wallace," with a resident house-surgeon and two external superintendent medical officers, a perfect system of hospital record is not kept. In this it might, indeed, set an example deserving of imitation elsewhere, for it admits all classes of cases, and is even somewhat heroic and imprudent in opening its portals to dangerously communicable diseases, without the possession of proper means of isolation. Dr. Sutherland would not then have to lament as he does, that after analysing the statistics of two years, he could place little reliance in them, "as there were no two cases alike—the age, constitution, and habits of life, the season of the year, and other circumstances, exercising an influence upon the condition of the patient." So is it in all hospitals. It is for the unravelling and harmonising of these mysteries, and the deduction from them of the general laws by which the phenomena to which they relate are explained, that by the aid of the vital statistics of hospitals we can hope to derive the practical experience "which formulates the past, renders the present fruitful, and prepares the future." That a comprehensive, uniform, and general system of hospital statistics has still to be found, is a standing reproach to our profession.

The other hospitals described by Dr. Sutherland are all well known, and need no further mention.

On the Treatment of Cancer. By JOHN CLAY, Professor of Midwifery in Queen's College, and Obstetric Surgeon to the Queen's Hospital, Birmingham. London: J. and A. Churchill.

PROFESSOR CLAY publishes in a pamphlet form the articles which first appeared in this journal on the treatment of cancer, especially of the female generative organs, by Chian turpentine. Prefixed to the papers is an introduction, dated April, 1882, which shows that up to this period Professor Clay's faith in Chian turpentine had suffered no abatement. The preface has one other feature of great interest—a statement that amongst other communications from numerous medical practitioners testifying to the value of Chian turpentine in cancer, is one from Professor Esmarch, informing Prof. Clay that "he has had a complete cure in a case of cancer of the bladder in a man." It would be interesting to know the particulars of this case, especially in respect of diagnosis, as also of "two cases reported," to Professor Clay, "of cancer of the liver cured" by turpentine. It is to be regretted that Professor Clay makes so little account of the small amount of confirmatory evidence adduced in support of his views, and of the serious adverse testimony, notably that of Mr. Hulke in THE LANCET of June 25th, 1881; and that of Mr. W. Brown in THE LANCET of Dec. 31st, 1881; the former showing that in the Middlesex Hospital the Chian turpentine was found to be thoroughly useless as a remedy; the latter that no signs of improvement occurred in eight cases treated in the Leeds Infirmary.

We shall not be suspected of any prejudice in this matter. We were only too glad to publish anything that seemed to justify a hope that a miserable and mortal disease was to be brought under the control of medicine. We did not by a word of doubt damp the ardour or the hope naturally excited by the papers of Professor Clay. But we only now feel the more free to say that it is time to take grave notice of opposing testimony, and to submit cases and cures to the observation of others. The subject is too serious, both in its human and its professional bearings, to admit of delay and discrepant testimony.

OUR LIBRARY TABLE.

A Treatise on Aural Surgery. By H. MACNAUGHTON JONES, M.D., Professor of Obstetrics and Gynæcology in the Queen's College, Cork; Surgeon, Cork Ophthalmic and Aural Hospital, &c. Second Edition. Revised and Enlarged. London: J. & A. Churchill. 1881.—The early demand for a second edition of this work has justified the high opinion we had originally formed of its value. The new edition has been considerably enlarged and almost entirely rewritten, and is brought well up to date. Diseases of the ear are notoriously but imperfectly understood both by the profession and the public. Those who wish to study this class of affections cannot do better than take as a guide Dr. Jones' pages, which are based not only upon a good special knowledge, but on a wide acquaintance with general medicine and surgery.

House Sanitation. By G. H. STANGER, C.E. With Illustrations. Wolverhampton: John Steen and Co.—Mr. G. Hurst Stanger, Engineer to the Wolverhampton and District Sanitary Protection Association, has published a useful pamphlet on house sanitation. He describes in detail the various conditions of house drainage which are known to be associated with nuisance and injury to health, and he there explains how the several conditions may be remedied. The principles which he lays down are in no way novel, but they are put forward, by means of diagrams and otherwise, in a manner which can easily be understood. They are sound, and we can endorse them; indeed, if they were generally applied we should soon hear but little of diseases brought about as the result of sewer emanations getting into dwelling-houses.

Holidays in Spain. Being some account of two Tours in that Country in the Autumns of 1880 and 1881. By F. R. M'CLINTOCK. London: Edward Stanford. 1882.—This work appears very opportunely at the time when most of the busy workers who are in a position to take a holiday are beginning to consider where they can best dispose of themselves. The object of the author is to point out to those

who are tired of the everlasting round of Switzerland and other parts of the Continent, to which the English flock annually in such crowds as to destroy much of the enjoyment of travel, that there is a splendid field, hitherto comparatively neglected, within easy reach of England. Mr. M'Clintock describes in a pleasant manner a run in 1880 from London to Granada, visiting *en route* Madrid, Toledo, Cordova, and Seville; and in 1881 a revisit to Madrid by way of Barcelona, Tarragona, Valencia, and Saguntum. Travelling in Spain is an easy matter in these days of railroads; the hotels, as a rule, at least in the large towns, are comfortable, and the charges moderate; and the objects of interest are numerous. Although a knowledge of the Spanish language adds greatly to the enjoyment and to the instruction gained by travel in the country, it is not indispensable—at least in the more frequented routes. Circular tickets for the railways can now be procured, and are very convenient, but have the drawback of confining the holder to a predetermined route. In recommending our readers to explore this, to most of them, new field, we would merely give two cautions. They should invariably arrange beforehand the charges to be paid at hotels, taking care that there are to be no extras; and they should never forget to be courteous to all, whatever may be their rank or position. The Spaniard is, as a rule, polite, kind, and obliging; but he is also proud, and expects to be treated with courtesy. The last chapter of the book contains the result of the author's impressions of Spain, and a brief but interesting notice of its literature. The volume is one which may well be taken up as a pleasing amusement for a leisure hour, and as indicating in a general manner the variety of interesting objects to be seen during a holiday ramble through sunny Spain.

John Howard's Winter Journey. By WILLIAM A. GUY, M.B. Cantab., F.R.S., &c. London: De La Rue. 1882.—Under this modest title Dr. Guy gives us a charming sketch of the life and labours of the great philanthropist and reformer of our prisons. The volume comes opportunely at a time when the working of the present system is under discussion. There can be no doubt that we have made a great advance in prison discipline and management since the end of last century, but still there is much to be desired. Our present system is too inelastic and presses with undue severity, in some cases fatally, as repeated inquests have shown, on the weak and feeble, while, we fear, it has little deterrent effect on the hardy criminal. We have yet to learn how to discriminate in our punishments. One of the most interesting episodes in Howard's life, as narrated by Dr. Guy, is the description of the village of Cardington in Bedfordshire, which Howard converted from a damp, squalid spot to a village of wholesome-looking cottages, embowered in noble trees of his own planting. So excellent was the work, that the cottages "now, after a lapse of a century, seem as strong and sound as when they were first built; and having made a healthy, wholesome, and decent life a possibility to three generations, there is no reason why they should not continue to be a blessing to many more yet to come." Dr. Guy successfully, we think, rebuts the charge brought against Howard of harshness in his relations with his family. The medical evidence goes to prove that the insanity in the case of his son, which the detractors of the father endeavoured to show was the result of harsh treatment, was in reality due to the habits of dissipation into which he fell of himself, or was enticed, as some aver, by a servant of the elder Howard. Dr. Guy also advances another hypothesis to account for the son's insanity. The father was called an enthusiast; might not the enthusiasm of the father have developed into madness in the son? Howard's treatment of his child may not have been judicious, but there is no evidence to show that it was either harsh or cruel.

Medical Adviser in Life Assurance. By E. H. SIEVEKING, M.D., F.R.C.P. Second Edition. London: J. and A. Churchill. 1882.—The facts in this edition are pleasantly arranged, and a considerable amount of information is conveyed in a short space and in a practical manner. The style is graceful, and Dr. Sieveking, as becomes the Senior Censor and an advocate for the retention of the classical part of the examination for the membership of the Royal College of Physicians, airs his Latinity occasionally and always to the point.

FORFARSHIRE MEDICAL ASSOCIATION.

DR. LAWRENCE presided at the annual meeting of this Society held at Brechin last week. The following office-bearers were elected for the ensuing year:—President: Dr. Maclagan-Wedderburn, Forfar. Vice-Presidents: Dr. Christie, Dundee; Mr. Murray, Forfar. Secretary: Dr. Sinclair, Dundee. Council: Drs. Anderson, Miller, McCosh, Rorie, and Messrs. C. Moon and Stevens, Dundee. Local Secretaries: Dr. Dewar, Arbroath; Dr. Lawrence, Montrose; Dr. Mackie, jun., Brechin: and Mr. Alexander, Forfar. A paper by Dr. Alex. Lawrence was read on "Salicin in the Treatment of Acute Rheumatism," and an interesting discussion took place. Dr. Miller reported that the committee appointed to consider the hygiene of infectious fevers were now in a position to report, and the following motion included their results:—That the Association recommends as follows: When an infectious fever has appeared in one or more members of a household, other members who may have been exposed to the chance of infection by intercourse with them, or otherwise, should not be removed to a household where there are others liable to be infected until the expiry of the period of incubation shows that they have escaped (without going to extremes, the period of incubation may, for practical purposes, be considered to be for small-pox, typhus, whooping-cough, and measles, fourteen days each, and for scarlet fever and diphtheria ten days each); that convalescents from these fevers should be considered as still liable to give off infection until the expiry of time, counting from the beginning of the illness, ranging from each fever as stated below: Small-pox, fourteen days after termination of scabbing; typhus, twenty-eight days from inception; scarlet fever, eight weeks from inception; diphtheria, six weeks from inception; whooping-cough, eight weeks from inception; and measles, six weeks from inception. Dr. S. Lawrence showed a case of spontaneous amputation of the foot in a child ten months old. A donation of three guineas was voted to the British Medical Benevolent Fund.

BRIGHTON AND CANNES.

To the Editor of THE LANCET.

SIR,—Mr. Robert Rawlinson, C.B., remarks in his letter that "you have written quite as strongly about Cannes as about Brighton, and apparently with less threatening results." As the author of nearly, if not all, the communications you have published relating to the sanitary condition of Cannes, I may supplement Mr. Rawlinson's observation with an item of information that may be of interest as an example in the present instance. The authorities of Cannes, far from resenting the frank relation of their difficulties and shortcomings, manifested their gratification at the interest displayed in their affairs. I have a letter from M. Hourlier, the architect of the town, expressing these feelings both on behalf of the mayor and himself. On the table of the Public Works Department of the Cannes Town Hall or Mairie is kept, for reference, all the numbers of THE LANCET containing articles on Cannes, and notably Mr. Rawlinson's letter on the Sewerage and Drainage of Cannes, published in your issue of February 11th. The latter exposure has the severest passages underlined. Yet foreigners are notably more susceptible to criticism than Englishmen, who for generations have been accustomed to freedom of the press and self-government.

I have the honour to remain, Sir,

July 18th, 1882. YOUR CORRESPONDENT.

THE LANCET.

LONDON: SATURDAY, JULY 22, 1882.

THE refusal of the Home Secretary to entertain the question of the appointment of a Royal Commission to consider the whole matter of hospitals, reminds us that this question still presses for solution, and that it cannot be much longer delayed without danger. Scarcely a day passes without piteous appeals to the public for aid towards the support of the unendowed asylums for the sick; the threatened collapse of one of the most important and useful of them (the Fever Hospital) for want of means; the living from hand to mouth and expenditure of their capital of many of them, with the growing feeling in the public mind that the institutions themselves are behind the age in construction and management, all point to the same conclusion. We can quite understand why, in the present state of the question, the State declines to interfere, because the facts and figures necessary for its right understanding have not been properly collected, and because many of the evils pointed out can and ought to be remedied without the intervention of authority, by the public and the profession, if there were a determined feeling and effort to grapple fairly with the whole matter.

The working of the Poor Laws since the passing of the Act of 1834, and the subsequent continuing legislation in the same direction, have provided amply for the needs of the actually indigent classes in sickness. But the very nature of those laws interferes injuriously in this matter with the poor who are sick, but who are not actually destitute, who decline to come upon the rates, and who are only left without resources by the occurrence of disease or accidents. Hence, and for other reasons of a similar kind, an official inquiry is imperative to determine in what exact direction further legislation is necessary, to meet an urgent public need. But, before such an inquiry can be efficaciously conducted, something more exact requires to be known of the general state of the hospitals, and their distribution and management throughout the country, than is now on record in a reliable form. It is abundantly evident that the information cannot be extracted from hospital managers, and that it can only be collected by a patient and exhaustive personal examination, carried out under the authority of the State, by persons armed with compulsory power to procure the information. For this reason we are disposed to think that an inquiry of the same character as that so well performed by Messrs. BRISTOWE and HOLMES nearly a quarter of a century since, is all that should at present be asked for; that a couple of competent officers should be selected for the work; that sufficient time should be allowed for its efficient performance; that it should be thoroughly exhaustive in its scope; and that it should extend to an investigation of the hospital system and institutions of other countries. It would be preferable to place it under the supervision and control of the Local Government Board, whose chief has a seat in the Cabinet, and which possesses an efficient medical staff, by whom the information obtained could be collated and printed for submission to Parliament, for such action as may then appear to be necessary. It seems to us that this is the only proceeding likely to recommend itself to the authorities, as a reasonable means of dealing with the present dead-lock and difficulty, in the interests of all concerned.

Since the publication of the report of Messrs. BRISTOWE and HOLMES in 1862, an entirely new departure has been taken in hospital construction and arrangements. That report has long been out of print; its views were not generally accepted, and it is now little known; but it marked an epoch, and might be taken, together with the instructions issued by the Minister of the Interior in France in 1865 to all local authorities, detailing the hygienic conditions to be observed in the creation of hospitals, as the basis and starting-point of the new inquiry. The circular referred to gave effect to a report furnished by a special commission, presided over by General MORIN, with MM. BOUILLAUD, COMBES, DEVERGIÉ, GILBERT, HUSSON, LAVAL, DE LURIEN, MALGAIGNE (Secretary), MELIER, MICHEL LÉVY, PARCHAPPE, PAYEN, TARDIEU, and DE VATTEVILLE, as members. More competent and distinguished authorities could not have been found anywhere. Unless some such step as we have indicated be taken, and that quickly, it is more than probable that a large portion of our labouring population in town and country may be subjected to considerable distress and hardship during sickness, should the present hospital accommodation of the country fail in its appointed work, from any of the causes now in operation to paralyse its action, the chief of which is the manifest decline of public support.

THE electors to the Waynflete Professorship of Physiology, Magdalen College, have issued a notice to the effect that they will proceed to the election early in August, and that candidates must send in their names and any papers which they may wish to submit to the electors on or before the 20th of July.

The electors will not probably experience much difficulty in making their selection, for there are few, very few, who can be regarded as possessing the necessary qualifications. Yet upon their decision it depends in great measure whether Oxford is to become an important and numerously attended school for the fundamental subjects of medical education, or whether the office is to degenerate into a mere dilettante Professorship, held no doubt by a man of talent—for surely none other would dare to present himself,—who would now and again give to the world the results of some painstaking research, but who would be utterly unable to avail himself of the splendid opportunity that now presents itself of creating a school of physiology. The man whose services are now required must be young and energetic, familiar with physiology in all its bearings, willing to give up all his time to its pursuit, capable of delivering a course of lectures that shall be interesting and intelligible to a class of junior students, and at the same time able to guide, promote, correct, and supervise the work of the more advanced students and of those who exhibit special aptitude for this particular branch of study. He must be one who can by his own example tempt others into scientific research.

At a great university like Oxford there must always be some men of parts who with the possession of ample means and leisure need only to be brought into the magic circle to learn how charming is divine philosophy, and who require only an enthusiastic leader to be carried away by the passion for research.

The example of Cambridge should not be lost on Oxford. By selecting a man in the prime of life, of unusual ability, and possessed of singular powers of attracting good men around him by his earnestness and zeal, a physiological school has arisen within her walls second to none in Europe, and MICHAEL FOSTER may point with pride to the excellent work that has been accomplished in the laboratory over which he presides, and to the fact that many who were once students in it now occupy distinguished positions in other countries. So far as we can learn, Professor ARTHUR GAMGEE is the only candidate who is likely to come forward. It is probable that if he is disposed to leave Owens College, with which he has so long been connected, and at which he has done so much good work, he will not meet with any opposition. He is in every way well qualified for the post. He is at mid age, full of energy and enthusiasm; he has had large experience in teaching; he has done much original work; he is the author of the best treatise on physiological chemistry that we possess; and we much mistake if his large knowledge, genial disposition, and warm heart, do not make him a general favourite in the new society he will join at Oxford.

M. FRANCOIS FRANCK has communicated to the Bordeaux Medical Society some instructive results of the experimental obstruction to the pulmonary circulation. The effect of a hindrance to the circulation of blood through the lungs in causing engorgement of the right heart, and secondary insufficiency of the tricuspid orifice, is one of the most familiar facts in medicine. M. FRANCK'S object was to produce this experimentally in order to study more closely the physiological conditions and symptoms, one of which was the chief subject of the communication—viz., the indications of the pulmonary obstruction which are afforded by the jugular veins. The phenomena may be produced by the tracheal insufflation of irritant vapours, such as sulphurous acid, the animal having been rendered insensible by chloral or motionless by curara. This sets the whole contractile mechanism of the lung into energetic action, the muscular tissue of the bronchial tubes and of the vessels. Hence there is a retraction of the whole lung, indicated by the depression of the costal walls, and there is also a diminution of the calibre of the pulmonary vessels, causing an engorgement of the right side of the heart. If the obstruction lasts long enough and is sufficiently intense, the feeble parts of the wall of the right ventricle—i.e., the part above and to the right—yield to the excess of internal pressure, and drag outwards the papillary muscles, and the chordæ tendineæ, and with them the free edge of one of the segments of the tricuspid valve. By this mechanism, which was pointed out by KING in 1837, temporary tricuspid regurgitation occurs, and causes a venous reflux, visible as the jugular pulsation synchronous with the ventricular systole. The tricuspid insufficiency and venous pulse continue as long as does the engorgement of the right side of the heart. This "safety-valve action," as KING called it, may be thus constantly produced artificially. The analogy between this induced condition, and that which occurs in every paroxysm of spasmodic asthma, is sufficiently close, and there can be no doubt that in the latter the same cardiac phenomena occur. It is probable that the production of this tricuspid reflux is facilitated by certain conditions of the heart itself. The diastolic relaxing influence of the pneumogastric nerve undoubtedly plays an important part in the experimental production of this condition, and no doubt also in its clinical production. M. POTAIN has insisted on the transient tricuspid regurgitation which seems to be produced by a nervous mechanism under the influence of strong irritation of the abdominal viscera, acute affections of the liver, intestine, and stomach. The reflex action may probably be double, and the effect produced not only by cardiac inhibition, but also by obstruction to the pulmonary circulation.

THE judicial functions of the General Medical Council have received some recognition, if not development, during the recent sitting of the Council. The Home Secretary's remark in Parliament, that the Council had power to deal with cases in which medical practitioners were making undue uses of unqualified assistants, gave great gravity to the position of the Council in the case of Mr. DAVID BEATSON MURDOCH, who was shown to have three different dispensaries, worked chiefly by unqualified persons. The facts of this case have been already commented on by us, and we may expect them to serve as a warning to those practitioners who place unqualified assistants in full charge, or what is virtually such, of dispensaries. The Medical Council have declared this conduct to be infamous in a professional respect; and it is scarcely to be doubted that if a similar case were to come before them again, they would use their power of erasing the name of the practitioner.

We propose to state the outline of several cases brought under the notice of the Council, as it is clear that henceforward the judicial function of this body, or of its successor, will not lie so dormant as hitherto. To be forewarned is to be forearmed. The Council, like the Corporations, has been so insensible to breaches of professional conduct that some members of the profession have become careless too. Juries and Parliament have the credit of raising public feeling on this question, and compelling the Medical Council to do its duty. Henceforth there will be no excuse for those who bring themselves under the punishment which the Council is empowered to inflict in the twenty-ninth clause of the Medical Act, which runs as follows:—"If any registered medical practitioner shall be convicted in England or Ireland of any felony or misdemeanour, or in Scotland of any crime or offence, *or shall after due inquiry be judged by the General Council to have been guilty of infamous conduct in any professional respect, the General Council may, if they see fit, direct the Registrar to erase the name of such medical practitioner from the Register.*" In the Dentists Act the thirteenth clause gives similar powers to the Council as regards dentists, in respect of cases of felony or misdemeanour, or "*any infamous or disgraceful conduct in a professional respect.*" The

following are some of the other cases in which the Council has had to act judicially during the recent sitting. The case of a registered dentist, Mr. VALLECK CARTWRIGHT MALLAN. Mr. MALLAN confessed to carrying on practice as a dentist in different houses, under various names,—at 173, Praed-street, and 64, High-street, Nottinghill, in his own name; at 94, Praed-street, as CHARLES SMITH; and at 106, Edgware-road, as C. VALLECK. The Council having received assurance that this practice shall be discontinued, did not think it necessary to take any further action. The Council was implored to restore to the Register the name of a practitioner erased in 1877 on conviction of an unnatural crime. The petitioner's argument was an appeal *ad misericordiam* on the ground that his health, mental and physical, had been broken by much worry and anxiety, and so that he had yielded to impulses altogether foreign to his thoughts when in health. The Council resolved to take counsel's opinion as to restoring the name to the Register. A very painful case came before the Council—that of WILLIAM STORY, of Linsdale, convicted of feloniously setting fire to a certain house in his possession with intent to injure and defraud. His name was ordered to be erased from the Register. It had previously been removed from the list of Fellows and Members of the College of Surgeons. The Council determined to leave another case for the present in the hands of the Branch Council, that of a practitioner found guilty of adultery with a patient in the absence of her husband. The Council also devolved on the Branch Council the duty of further investigating a charge against Mr. RICHARD ALBERT SHIPMAN PROSSER, M.R.C.S., L.S.A., brought by the King and Queen's College of Physicians, on behalf of one of their licentiates, Mr. EDWARD HYACINTH O'LEARY. At an inquest on the body of ELLEN AILSLY Mr. PROSSER swore to having examined the kidneys and other organs and found them healthy, and that death was due to the negligence of Mr. O'LEARY. On this evidence Mr. O'LEARY was committed for manslaughter. At a second post-mortem the kidneys were found undisturbed. It was also found that the examination of the other viscera was most incomplete. The stipendiary magistrate thereupon discharged Mr. O'LEARY. The profession will look with interest to any elucidation of Mr. PROSSER'S conduct by the Council or the Branch Council. The Council was invited to proceed to an extensive erasure of names of persons in the Dentists' Register on the ground of their doubtful right to be there. But it did not accept the invitation. It gave power to the British Dental Association to prosecute Mr. T. L. CALLENDER, of Bridge House, Burton-on-Trent, for practising as a dentist there, not being qualified, and announcing himself as in practice with Mr. GODDING, M.R.C.S., Surgeon Dentist, though there is no Mr. GODDING in Burton-on-Trent.

JOHN COTTON, M.D. Edin., Inspector-General of Hospitals and Fleets, whose death took place on the 12th inst. at the Royal Naval Hospital, Stonehouse, Plymouth, served on board the *Arethusa* and *Royal Albert* during the Crimean war in 1854–55, was engaged in the batteries and trenches before Sebastopol, and for his services received several decorations. In 1857 he was present at the capture of Canton; also, on board the *Inflexible*, at the destruction of a piratical fleet and stronghold near Hong Kong.

Annotations.

"Ne quid nimis."

THE DEAD AT ALEXANDRIA.

ACCORDING to the advices received from Alexandria, this unfortunate city is in great danger of pestilence, on account of the large number of unburied bodies that lie amidst the ruins. We would urge, in the face of this statement, that should an epidemic arise from such a cause, the authorities would be greatly to blame. In this case, at least, it could not be said that the consequences were not foreseen. It was well known that the fleet would bring to bear the most powerful weapons that have ever been used since the invention of gunpowder. There could be, therefore, no doubt as to the havoc that would be wrought by such monster guns, if the Egyptians should prove bold enough to face the fire. Nor can it be urged that men and time were wanting to dig the graves. For such a purpose native labour could be obtained, if necessary by compulsion. If, in spite of these considerations, it should prove that it was impossible to dig graves of sufficient depth with the requisite promptitude, the sea offered another means of avoiding an epidemic. Our own sailors were buried at sea, and the sea has always been considered an honourable grave. There can be no lack of old boats or barges at Alexandria, that might have been filled with the victims of the bombardment and taken out some miles to sea, where a collective burial, with all the rites and ceremonies the Mahomedan population might desire, would have been performed, and several hundred bodies disposed of in a few hours. If time and labour were so scarce as not to admit of the lowering, one by one, of each body into the sea, then the boats and barges thus converted into huge coffins could be sunk at the conclusion of the funeral service. After all the destruction caused by the bombardment, the question of saving a few old boats is hardly worth considering; but no measure, however stringent, calculated to lessen the appalling danger of the outbreak at such a moment of an epidemic should be neglected.

THE SEWERAGE OF THE WEST-END.

WE wonder whether the authorities of the West-end of London will bring an action against us if we dare to endorse an opinion expressed in a letter written to *The Times* by a competent surveyor, to the effect that the sewerage of certain districts of the metropolis is defective. Mr. Alex. Peebles, the district surveyor of the northern division of St. Marylebone, has done good service in calling attention to the deplorable and disgraceful state of the sewers in some of the most fashionable districts. He says:—

"A short time since, in consequence of a death from diphtheria, I was called upon to inspect the sanitary condition of a house in one of the fashionable West-end squares. After having carefully inspected the dwelling, I directed my attention to the streets in order to ascertain what provision existed for the escape of gases from the public drain, when to my astonishment I found that there was not a single ventilator in the whole square, except the gullies; nd u pon tracing this drain to its main sewer and following it, I found the ventilators so very far apart that their effect must be imperceptible upon the gases thus pent up. I have since made frequent similar observations with a like result. The effect of depending upon the gullies to act as ventilators also is that when a storm occurs—not an unusual thing—the rush of water into the sewers drives the gases rapidly through the private drains into the houses; indeed, they become the only exits, while at all times the private drain is sucking the sewer gas, unless the drains are effectively disconnected, which is seldom the case."

It is satisfactory to know that not only Brighton, but

London, will be benefited by the attention which our remarks and criticisms have directed to the mistaken policy of leaving the sewers to pour their foul and poisonous gases through open gratings into the streets. The mischievous effects of this wholly irrational system are more conspicuous in certain localities than they may be in others, but they are disastrous to health everywhere; and we have no hesitation in asserting that the total sickness and mortality of most populous districts would be sensibly reduced if the sewers were properly ventilated by shafts or pipes opening well above the level of the highest rooms in the adjacent houses, and no escape of gas were permitted on the street level. As we have repeatedly insisted, house-drains should be entirely cut off from the sewers, not by mere "traps," but by properly constructed disconnecting chambers. These are the imperative and urgent necessities of a sanitary condition at Brighton, and the same measures must sooner or later be adopted throughout the metropolis. The sanitary engineers *know* we are right, and they would consult the interests of public health if they spoke out boldly on the subject, instead of bolstering up a system which their own better judgment condemns.

INDUCED FLUORESCENCE IN THE EYE.

EHRLICH has made the curious observation that fluorescence can readily be communicated to the liquids of the eye (aqueous humour), in which the phenomenon is very conspicuous on account of the dark background. In his experiments he employed uranin, the ammoniacal compound of fluorescein. Two cubic centimetres of a 20 per cent. solution were injected beneath the skin of a rabbit, and after a few minutes the aqueous humour was let out by paracentesis. After from a quarter to half a minute an intensely luminous green tint was visible at the edge of the pupil; in a short time the colour extended in the pupillary area, and in two or at most three minutes had filled the anterior chamber. This experiment shows that the anterior surface of the iris does not in any degree participate in the regeneration of the aqueous humour. According to Ulrich, a part of the transuded fluid comes from the vitreous (i.e., from the vessels of the choroid), and passes by the zonule of Zinn into the posterior chamber. Ehrlich's results are opposed to this assumption. If blood-serum is obtained at the same time, its tint is exactly the same as that of the transuded aqueous humour—a fact which makes it probable that the latter is a direct transudation from the blood. The rapidity with which the process goes on is also opposed to Ulrich's view, since within five minutes of the injection of the material the chamber is filled with the green liquid. In one animal, into which a considerable dose had been injected, Ehrlich observed the appearance of a pale-green line in the pupillary region, constantly vertical in direction, and corresponding in position to the greatest curvature of the cornea. A band developed out of this line, and this again into two striæ separated by a narrow dark zone. A short time after the line was distinctly visible, the cornea became separated into a medial and lateral dark zone, the division between the two being occupied by the green line. It is easy to demonstrate that the appearance of the line does not arise in the cornea, but in the liquid in the anterior chamber, immediately behind the cornea. The vertical direction of the line is no doubt determined by the shape of the eye. Ehrlich is of opinion that the line must be regarded as the result of the meeting of two currents of secreted liquid. At the periphery of the iris there are two centres of secretion: an anterior, nasal; and a posterior, temporal. When both currents meet, the peculiar hue is produced. The normal secretion of the posterior chamber is distinguished from the aqueous humour by its deep-green tint and a higher specific gravity. Under normal relations the secretion does not pass into the anterior chamber; but abnormal influences, such as paracentesis, cause it to do so. Ehrlich believes, therefore, that his experiments have disproved the theory of Ulrich, that both chambers are connected by a filtration current, which passes forwards through the roots of the iris and the ciliary processes. Each part is probably supplied from the bloodvessels. The chamber is not supplied with liquid from the whole circumference of the iris, but from special centres. The short time in which the liquid can be reproduced is also an argument against the possibility of a filtration current. These experiments show that the fluorescence can be very readily produced, and may supply the means of elucidating many physiological problems. One advantage of the method is that, being absolutely devoid of danger, it can be employed on human subjects. The internal administration of fifteen cubic centimetres of the above-mentioned solution will suffice.

PERILS OF THE HOT-AIR BATH.

THE hot-air bath, in all its varieties of construction and arrangement, is a powerful agent for the disturbance of the circulatory system. The change effected may be good, or it may be bad, for the subject; but it can scarcely be inoperative. The heart's action is quickened; the tension of the blood-pressure is at first heightened, and then—if copious perspiration take place—it may be reduced. Speaking generally, there is a determination of the blood to the surface, leaving the central and deep organs less fully supplied than before. In this way, doubtless, local congestions are occasionally relieved by the bath. Under ordinary circumstances, the change effected in the distribution of blood and pressure is likely to be beneficial, but if the heart be weak, or the larger vessels rigid, it may happen that faintness ensues. Then something is done, either by the affusion of cold water on the extremities, or in one or more of several empirical ways, to drive the blood in again, and this endeavour may prove the last strain that throws the whole physico-vital apparatus of the circulation out of working order, and renders the continuance of the essential functions of life difficult or even impossible. We believe the Turkish bath to be a most potent and, when rightly managed, useful agent for the control of the circulation; but it is necessary to warn the public against the reckless use made of it in cases the precise nature and peril of which are not understood. Except by the robust and thoroughly healthy, the hot-air bath should on no account be employed without express medical approval. Even this restriction is scarcely enough, because it may happen that the subject of a weak heart or abnormal bloodvessels regards himself as healthy, until the unaccustomed demand made on his organs of circulation by the bath discovers the weak place in his economy. It is not desirable to lay too much stress on those deaths which occasionally occur in, or after a visit to, Turkish baths. They are accidents in the use of the agency, and as such must be regarded as significant. At the same time, it is desirable that the dangers of the bath should be more generally understood than they would seem to be, and that the proprietors of these establishments should be required to instruct their managers and attendants to send at once for medical assistance whenever a visitor becomes faint or even momentarily unconscious. Such occurrences must needs portend peril of death; and, however large may be the proportion of instances in which the "slight faint feeling" or "sleepiness" passes away, it is manifest that a grave risk is in *all* cases incurred, and a responsible medical man should be instantly summoned to aid the recovery. There ought to be nothing left to the discretion of the manager or attendant in such a case. Again, although it is easy to see that proprietors would prefer to avoid deaths on their premises, no person who has

been ill or even slightly unwell in the bath should be allowed to leave the establishment without being seen by a doctor. Further, we think the practice of *sleeping* in the hot rooms ought to be interdicted. There is always danger at the moment of awakening.

DEATH FROM MORPHIA IN A HOSPITAL.

A DEATH under very distressing circumstances took place last week in Westminster Hospital. A man named Ebden was an inmate in one of the wards suffering from severe heart disease, but sufficiently well to be able to sit up in the ward during the latter part of the day. In the same ward was another man, who was receiving hypodermic injections of morphia, which appear to have been given by the nurse in charge. One day, when about to give the customary injection, she placed the bottle containing the morphia solution on the table in the middle of the ward by which the man Ebden was sitting. He then seized the bottle and drank off about a tablespoonful of the fluid. Every effort was made to remove the fluid from the stomach, and to counteract its poisonous effects, but they proved fruitless, and the man died from the effects of the morphia. Such an event is extremely distressing, more particularly as it tends to lessen the confidence of the public in hospitals. The coroner's jury returned a verdict of death by misadventure, but added a rider that in their opinion the nurse was to blame for leaving poisons within reach of patients able to leave their beds. Those familiar with the working of a hospital will hardly concur in this opinion, but they will rather ask how it is that the nurse was in possession of the bottle of morphia. The coroner's jury would have done better service if, instead of trying to affix blame upon a nurse who was not shown to have been careless, they had elicited whether it was the custom in the hospital for the administration of hypodermic injections of morphia to be relegated to nurses. We have no hesitation in saying that such a practice is to be deprecated in the strongest possible terms. It is no part of a nurse's duty to determine on the necessity for such an administration, still less on the amount required, and, least of all, is a nurse qualified to inject the fluid. Had the administration of hypodermic injections of morphia been kept in the hands of the resident staff we presume a bottle of a strong solution of morphia would not have been in the ward, and could not have been left on the table. The case clearly points to a danger connected with the other plan, and we hope it will prove a warning to the authorities of all hospitals, and that precautions will be taken to prevent the repetition of such an unfortunate accident.

NOTIFICATION OF DISEASE.

A VERY lively difference of opinion obtains between the medical officer of health of Nottingham, Dr. Edward Seaton, and a considerable section of the medical profession in reference to the expediency of a clause in the Nottingham Improvement Act, which requires the medical attendant in a case of infectious disease to give information to the householder of the existence of the infectious disease, the householder being required to notify the fact to the sanitary authority. Thirty-eight practitioners have presented a petition to the Town Council against the notification of diseases. At the request of the Health Committee, Dr. Seaton has drawn up a reply to the points of objection contained in the petition. The feeling of the petitioners seems to have been partly excited by the fact that the clause objected to was obtained somewhat indirectly in a Gas Bill. We share the feeling that questions like these should be raised boldly in the Legislature, and not carried by a side wind. On the main question we are of opinion that the time has come when there should be a notification of disease to the sanitary authority. Very striking facts come constantly before us showing the urgency of this necessity. This notification should be the duty of the parent, or other responsible guardian, of the patient. In the Nottingham Act the medical man is only required to inform the householder or parent on whom the responsibility of notification rests. It is not a forcible objection to this requirement to say that the diagnosis of infectious disease is not always easy, at least at first. Clearly, the medical man cannot inform the parent until he is satisfied in his own mind of the fact. Neither do we see much force in this connexion in the comparison between the knowledge gained in the confessional and that of infectious disease. There is nothing discreditable or immoral in having infectious disease. Injury might accrue to the householder by publication of the fact; but there need be no publication of it, and the sanitary authority will greatly frustrate its object if it gives publicity to facts conveyed confidentially to it. The whole community is interested in the limitation of infectious disease, and public opinion should be educated to the point of regarding it as creditable in any citizen to place information of infection at the disposal of the public sanitary authority. This cannot be done without the assistance of the medical profession; but they should be relieved of the actual duty of notification.

SANITARY STATE OF MARYPORT.

MR. J. SPEAR'S report to the Local Government Board on a prevalence of typhus fever at Maryport discloses a history and a course of inaction in sanitary matters which are well-nigh incredible. A regular sequence of cases of what is now shown to have been typhus was in progress from April to July, 1881, if not for a longer period, and yet at the end of that time the epidemic is described by the medical officer of health as one which "from the mild typhoid form, assumed the form of typhus." The disease continued to progress, and at the date of the official inquiry, early this year, it was found that in this small town, containing some 8100 inhabitants, "considerably over 100, probably nearly 200, cases" had occurred. The prevalence of typhus is well known to be almost invariably associated with those special forms of filth which go hand-in-hand with overcrowding, whether of houses or of individuals, together with destitution; and from the description given by Mr. Spear it is evident that Maryport is a town exhibiting conditions which are typical of those referred to. The houses are almost everywhere built on quite insufficient area, narrow arched openings lead to crowded and squalid courts, and in some cases four streets form a square facing outwards, the enclosed quadrangular space containing courts and smaller squares huddled together. Many of the individual dwellings were found to be quite unfit for human habitation; their condition as to filthiness is described as really shocking: cellars wholly beneath the surface of the ground, and receiving their sole supply of light and ventilation from very similar cellars to the front, were used by several persons as sleeping apartments, and overcrowding was found to be of common occurrence. In 1866 an intelligent sanitary authority inserted a provision in a local Act forbidding lodgers to occupy any room that did not afford to each inmate a space equal to 400 cubic feet; but no attempt has been made to enforce this very desirable provision. Indeed Mr. Spear relates an instance in this connexion which we trust is exceptional even in Maryport. The inspector of nuisances reported that two cellar-rooms, which in point of size were only adapted to receive six persons, were overcrowded by reason of their containing more than double that number of inmates. The cellars were found to be unlawfully occupied as judged by the local Act; they were damp and dark; the only window

which could open in either of them was a pane of glass some eight inches square, and not a single requirement of Sec. 72 of the Public Health Act with respect to cellar tenements was observed; and yet in face of all this it is recorded that the medical officer of health "did not consider this overcrowding," and so the cellars remained inhabited. But quite apart from conditions favouring typhus, it appears that the ordinary work of abatement of nuisances and of the removal of conditions injurious to health had been almost totally in abeyance, and, even in the face of an infectious disease such as that which had prevailed, no disinfection had been carried out under the supervision either of the medical officer of health or of the inspector of nuisances, verbal directions alone having been given "in several cases." The sanitary authority has no hospital, and hence only the destitute were isolated under the direction of the guardians of the poor. But the hospital resorted to for this limited purpose turns out to be a flat over a rag and bone dealer's stores, the effluvia from which, it is said, penetrate into the wards above, whereas the sewage from the hospital is complained of as percolating the stores below. The sanitary story from Maryport seems almost without a redeeming point.

THE CHEMISTRY OF PUTREFACTION.

THE Chemical Mechanism of Putrefaction, and the nature of the Alkaloids which result, is the subject of a recent communication to the Paris Académie des Sciences by MM. Gautier and Etard. They had previously shown that, as soon as the putrid fermentation of albuminous substances is well established, the reaction becomes alkaline, hydrogen disappears, and carbonic acid is released, at first rapidly afterwards more slowly, mixed with a little nitrogen and with traces of phosphuretted and sulphuretted hydrogen. At the same time, the liquids contain ammonia, with a little trimethylamine, fatty acids, lactic acid, a small amount of oxalic acid, traces of tyrosine, phenol, scatol, indol, guanidine, xanthine, and organic alkaloids. These substances are accompanied at the commencement by a mass of glucoproteins and a soluble proteoid substance, which disappears slowly. The authors of the paper believe that all this complex series of substances is due to the circumstance that the putrid fermentation breaks up the albuminoid molecule by a method of simple hydration, and reveals its complex constituents. The process really resembles the hydration of the albuminoids by baryta, which has been studied by Schützenberger, in which there is a similar liberation of ammonia and of carbonic acid, and of a like series of substances. Thus the albuminoid molecule is doubled under the influence of bacteria, just as under the influence of water aided by heat and alkalies; and it breaks up into two principal parts: one relatively resistant, from which the glucoproteins and later the leucines are derived; another unstable, forming ammonia and carbonic and other acids. It is supposed, therefore, that the odoriferous bodies observed during putrefaction, and also certain bases which may be obtained, must pre-exist in what is termed a "nuclear" form in the albuminoid molecule. To extract the basic substances the following method was found to answer best. The liquid products of putrefaction were acidulated with sulphuric acid and evaporated in vacuo, by which means the volatile acids, indol, phenol, &c., escaped. The residue was rendered alkaline by the addition of baryta, and then filtered and shaken up with chloroform, which dissolved the bases. They were extracted by fractional distillation of the chloroform and treated with tartaric acid. Potash added in excess to the tartaric solutions liberated a strong odour of carbylamine, and set free the oily bases, which could be separated by ether and dried in a vacuum. These resembled the bases described by Selmi: oily colourless liquids, bluing litmus, neutralising strong acids, and giving with nitric and hydrochloric acids, ferrocyanide of potassium, and ferric salts, the reactions of ptomaines. They were precipitated by bromine, iodine, and the phosphomolybdates. They quickly became resinous.

INFANTILE DIARRHŒA IN LEICESTER.

UNDER the influence of the recent unseasonably cold and wet weather the fatality of summer diarrhœa in our large towns was again very much below the average in the second week of July. It appears from the Registrar-General's last Weekly Return that during the week ending the 15th inst. the annual death-rate from diarrhœa among the eight and a half millions of persons estimated to be living in the twenty-eight largest English towns averaged 1·3 per 1000; it was equal to 1·4 in London, and averaged 1·3 in the twenty-seven provincial towns, which have an aggregate population very little larger than that of London. The main feature of these recent diarrhœa rates is the outbreak of the usual epidemic prevalence of the disease in Leicester. The annual death-rate from the disease last week in Leicester appears to have been equal to 7·4 per 1000, or nearly six times the mean rate in the twenty-eight towns. No deaths from diarrhœa were recorded last week either in Sunderland or Derby, whereas the death-rate from the disease ranged upwards in the other towns to 2·3 in Salford, 2·4 in Nottingham, and 2·7 in Preston. Thus the rate in Leicester was more than three times as high as that which prevailed in any of the other large towns. No fewer than 41 of the 63 deaths from all causes in Leicester last week were of infants under one year of age, against but 12, 13, and 22 in the three preceding weeks; and the fatal cases of diarrhœa, which had been but 2 and 4 in the two previous weeks, further rose to 18 last week. Ordinary July temperature would undoubtedly have caused a far greater excess of infant mortality than that recorded. It may be hoped that the local sanitary authority are fully alive to the necessity for exceptional measures for checking this waste of life, or at any rate for solving the yet unsolved problem involved in the question: Why does Leicester year after year suffer from this exceptionally high rate of infant mortality, mainly due to diarrhœa?

LUNATICS.

IT is something to know from the delivery of Lord Carlingford on behalf of the Government, or, as he curiously designates the particular authority for which he speaks, the "Irish Government," that the desirability of "substituting the workhouse system for the more extravagant system of lunatic asylums" is recognised. It may now be hoped that not only the "Irish Government," whatever that may be, but the Government of the United Kingdom of Great Britain and Ireland will soon begin to look into this matter, and arrive at the same conclusion. Manifestly, there must come a time of awakening, when it will be seen that the policy of building vast asylums at great cost, and filling them with imbeciles, is not only ill-judged, but futile and ruinous. It is not merely on the score of expense that this feeling must be denounced, but because it diverts the most recent and best appliances for the treatment of insanity from their legitimate purpose, and postpones the day when lunatics will cease to be regarded as creatures to be put away—in comfort, perhaps, but without hope or intent to cure them—and when, for the first time in the history of this branch of so-called medical practice, they will be treated as the victims of a malady. Until asylums come to be constructed and managed as hospitals instead of refuges, we shall never know how much may really be done to arrest the progress and repair the ravages of mental disease.

LONDON AMBULANCE SERVICE.

A MEETING of those interested in the establishment of an efficient system of ambulances in London was held last week at Charing-cross Hotel, presided over by Mr. James H. Crossman. The chairman gave an outline of the work of the committee that was appointed some months ago by the meeting presided over by H.R.H. the Duke of Cambridge. It appears that although the general hospitals sympathise with the movement they do not feel able to undertake to work the ambulances on account of the extra expense it would entail. We recently called pointed attention to the embarrassed condition of the finances of the general hospitals, which threatens to curtail their usefulness to a serious extent. We regret that from the same cause they are now prevented from taking up this new work, which would have considerably increased their efficiency. From its position and wealth we should have supposed that the authorities of St. Bartholomew's Hospital might come to a different decision. They could so easily undertake the ambulance work of the City, and their funds are able to bear the burden, and we believe that Sir Sydney Waterlow is personally interested in the ambulance scheme. In default of the hospitals the committee turned to the police-stations, and in this they were cordially aided by Sir E. Henderson. A thorough examination of the stations has been made, and the practicability of working the ambulance from them proved, and as a result fifteen police-stations have been selected at which to make a beginning. These stations are in as many different police divisions, and all of them are close to the four-mile radius from Charing-cross. It was proposed to have one horse ambulance at each of these stations always ready, and available for the use of anyone in the district. The ambulance designed by Dr. B. Howard, and known by his name, has been found to work well, and the committee has determined to adopt it for each of these fifteen stations. The scheme, as carried out at the London Hospital, is found to answer well, and with excellent practical results. In some of the larger provincial towns ambulance services have been organised, and good reports come in from them. Glasgow has a particularly perfect system, which is worked with the help of both telegraph and telephone. The meeting cordially adopted the report of the committee, and approved of all its suggestions. It has been calculated that £1000 is needed to start the plan, and the committee now appeals to the public for £2000 in order to put the matter on a thoroughly sound financial basis. There should be no difficulty whatever in quickly raising such a sum for an object so exceptionally good. We cannot but believe that when once well established and the working of the system thoroughly understood, these ambulances will be of immense advantage to the very numerous invalids who require removal from place to place, and that it will prove a very popular adjunct to our great hospital work.

CHILDREN'S HOSPITALS.

WE have received a circular in regard to a proposed hospital for sick children in Paddington-green. The scheme would appear to be a legitimate extension of an institution which has already done good service—viz., the dispensary for children's diseases in Bell-street, Edgware-road. There is much to be said in support of the proposal. In spite of certain drawbacks it must be admitted that there is an unquestionable balance of benefit to the community in the establishment of children's hospitals. There appears to have been ample scope for those already existing in the metropolis, and no doubt the proposed institution would be a boon to Paddington. For our own part we look forward to the time, especially in regard to sick children of the poor, when dispensaries shall be provided with a complete and efficient system of trained out-patient nursing as well as proper medical home supervision. But this, it may be said at present, is only a dream. Let us, at all events, frankly consider the responsibility of massing together sick children in a hospital unless every possible precaution has been taken for efficient ventilation and for proper quarantine, if not for complete treatment of intercurrent infectious diseases. With our present knowledge, opening a children's hospital is, indeed, no child's play. We confess we look with some anxiety on the starting of any children's hospital in a house, or couple of houses, and we believe this would be the feeling of those who are acquainted with the medical history, from beginning to end, of the Great Ormond-street and North-Eastern Children's Hospitals, and probably also of some of the others which were started in houses. We wish those who are promoting the Children's Hospital at Paddington all success in their admirable project, but if they can command enough pecuniary support to start with a new building which, however small, shall have the best known hygienic requirements, they will save themselves from much future anxiety, and obtain the confidence of the profession as well as the public.

ARRESTED DEVELOPMENT.

AN extraordinary instance of "sporadic cretinism" was described by M. Ball at a recent meeting of the Académie de Médecine. The affection was not hereditary. The father was alive, sixty-two years of age, and intemperate; the mother was forty-two years old at the time of the birth of the patient. The members of their families were all intelligent and well-developed, but all the other children died at an early age from affections of the nervous system. The subject of the disease was the last child, and presented all the appearances of normal development at birth, and up to a year old, when convulsions occurred, and were repeated almost daily for more than three years, and his growth underwent an extraordinary retardation. At the present time he is thirty-one years of age, but only forty-three inches high, and his weight is only four stones and a half. The dentition has remained incomplete, nineteen teeth alone having appeared, all of which are now carious. The face is free from hair, which is abundant on the head. The latter is large but irregular, the forehead receding. The countenance resembles that of a fœtus preserved in a bottle. The sexual organs are well-developed. There is no trace of goitre. Intelligence is very imperfect. The patient is able to understand what is said to him, but has considerable difficulty in expression. He knows the letters of the alphabet, but cannot read. His disposition is said to be inoffensive, and his tastes those of a young child. The condition is attributed to defective feeding at the end of the first year of life.

THE THIRD BLOOD-CORPUSCLE.

THE last published number of the Bulletin of the Royal Academy of Medicine of Rome contains a memoir by Professor Legge, entitled "Observations on the Blood of the Salamander, and of the Triton, concerning the plates (*piastrine*) of Bizzozero, and the invisible Corpuscles of Norris." We give a literal translation of Professor Legge's conclusions on this important matter. "1. In the blood of tritons and salamanders, in addition to the white and the red corpuscles, exists a special morphological element, which, if not identical with, is at least analogous, to the blood plates (*placche di sangue*) of Bizzozero. 2. In the preparations of the same blood are to be seen colourless discs, which correspond to the description which Norris gives of his invisible corpuscles. 3. These discs are the result of an alteration which the red corpuscles undergo in the presence of water. This confirms what Bizzozero asserts concerning the absence of Norris's invisible blood-corpuscle in mammalia. 4. The alterations which red corpuscles undergo in the presence of water are

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the solution and effusion of the hæmoglobin, the transformation of the nucleus, from the original oval, into a brilliant sphere, and the softening of the cellular membrane, which finishes by disappearing, leaving free the nuclei, which remain separate and floating in the liquid."

BRITISH HOSPITAL FOR JERUSALEM.

WHILE other European nations have for years had their hospitals and dispensaries in Jerusalem, the English have been unable to take their part in such charitable work. The cause of this has not been any lack of interest or charity on the part of our countrymen, but only the obstruction of the "inexpressible Turk." For some years the Order of St. John of Jerusalem has been trying to obtain a site for a hospice, and at length this has been granted by the Sultan, and as soon as the necessary funds have been subscribed, a suitable building will be erected. An influential meeting for the promotion of this object was held at the Jerusalem Chamber, Westminster, on the 7th instant, under the presidency of the Earl of Shaftesbury. The Prince of Wales and the Duke of Connaught sent letters expressing their entire sympathy with the object of the meeting. It is intimated that £2500 will be required at once for the building and fittings, and an income of £400 a year to maintain it in efficient working. Suitable resolutions were passed at the meeting, and a small executive committee was appointed. As ophthalmic diseases are so rife in the Jerusalem population, it has been wisely decided to call the institution the British Hospice and Ophthalmic Dispensary. We trust that the committee will find no difficulty in raising the needed funds for such a worthy object.

A NASTY RISK OF MEDICAL PRACTICE.

A PRACTITIONER of Galashiels has had to stand his trial before the High Court of Justiciary on a charge of rape, and with having taken advantage of an unmarried female who had submitted herself for a surgical operation. Medical men should always protect themselves from such charges by insisting on the presence of a third party. The charge in this case quite broke down; and after four hours and a half a formal verdict of "Not guilty" was returned, and the Crown resolved to abandon the prosecution. It is to be regretted that the Crown did not sooner find out the baselessness of the case against Mr. Edward Pratt Evatt. An address, signed by upwards of 1000 inhabitants of Galashiels, and expressive of esteem, was alluded to by the Dean of Faculty. We sincerely sympathise with Mr. Evatt, and congratulate him on the unanimous opinion of the Court and the esteem of the community in which he practises.

THE MANAGEMENT OF LUNATIC ASYLUMS.

WE are not disposed to attach undue importance to the recommendations of coroners' juries with regard to the management of lunatic asylums, but it is impossible to avoid the feeling that a mistake of policy, if not a graver error still, is made when the Commissioners in Lunacy refuse to send an inspector to watch proceedings before a coroner in a case which is likely to end in a charge of murder. It is not considered beneath the dignity or inconsistent with the duty of the Board of Trade to watch the proceedings which arise in connexion with a railway accident: an inspector is appointed to assist the coroner, or at least to take official cognisance of the evidence given. It seems that the Commissioners in Lunacy are too high and mighty for any such concession to public feeling. We venture to think they greatly err in not meeting public opinion half-way. Unless some practical interest in the welfare of the insane is soon shown by the officials of Whitehall, it will astonish no onlooker to find the Commission swept away as a costly encumbrance which has ceased to discharge the functions for which it was originally organised and has been hitherto maintained.

THE MEDICAL STAFF FOR EGYPT.

WE are in a position to contradict a statement which has appeared in several of the papers to the effect that Surgeon-General Alexander Smith, at present in charge at Gibraltar, had been selected to proceed to Egypt as Principal Medical Officer of the troops which may be employed there. We have reason to believe that the administrative staff will consist of Deputy Surgeon-General Hanbury in charge of the Department, and Deputy Surgeon-General Ekin and Brigade-Surgeon Manley in charge of Divisions. Judged by their antecedents, the selection appears to be very judicious, and we have no doubt the responsible duties of the respective appointments will be efficiently and satisfactorily discharged. Eight field hospitals are in course of equipment and will be sent out as required, each being under the charge of a brigade-surgeon or a senior surgeon-major. The troops in Alexandria will be provided immediately with a complete hospital equipment and the necessary staff from home.

THE CHAIR OF SURGERY IN EDINBURGH.

WE record with much satisfaction the fact that Dr. John Chiene has been appointed Professor of Surgery in the Edinburgh University, in succession to the lamented Professor Spence. The Curators had the embarrassment arising from having only one chair to fill and several suitable candidates. But we are sure that none of the unsuccessful candidates will deny that a very suitable selection has been made. Dr. Chiene is known most favourably not only as a pure surgeon, who practises his art with all the precautions of antisepticism, but equally well as a devoted teacher who finds his delight in expounding the principles of surgical science. He is a graduate too of the university, and has every inducement to labour in perpetuating its prosperity and its fame.

A NEW TITLE, L.A.M.D.

IT transpired at an inquest on the body of Bertram John Askew, Caledonian-road, that Mr. Greatorex, who had attended the patient, gave a certificate that the deceased died of acute hydrocephalus, and appended to his name L.A.M.D. The parents thought Mr. Greatorex a qualified medical man. The Registrar, doubting Mr. Greatorex's qualification, made inquiry, and the L.A.M.D. admitted that he was unqualified. He explained that the letters meant Late Army Medical Department. Such conduct is simply a fraud on the public. As Dr. Thomas said, it is especially bad, because it misleads the poor. A post-mortem examination by Dr. Pepper showed the absence of acute hydrocephalus. It is satisfactory to know that the facts have been reported to the Registrar-General, and that Greatorex will be prosecuted.

BROMPTON HOSPITAL.

DR. HERBERT ISAMBARD OWEN, M.R.C.P., St. George's Hospital, has been elected an Assistant Physician to the Hospital for Consumption and Diseases of the Chest, a vacancy in the medical staff having been caused by the resignation of Dr. William Ewart. Mr. Raymond D. Batten, M.R.C.S., St. Bartholomew's Hospital, has been appointed Resident Clinical Assistant in the room of Mr. Christopher Vise, whose period of residence has expired; and Mr. George V. Perez, L.S.A., University College Hospital, has been elected to succeed Mr. Arthur Foxwell, at the expiration of his term of office next month.

THE REPORT OF THE ROYAL COMMISSION ON THE MEDICAL ACTS.

WE have already explained to our readers that only the Report of the Commission has been as yet published. The evidence on which the Report is based has yet to come. We understand it is not likely to be published before the early part of August. We must wait until this is received before we can form a just estimate of the labours of the Commissioners or of the testimony on which their important report is based.

LIGATURE OF THE INNOMINATE.

MR. THOMSON furnishes us with the following particulars of the progress of his case of ligature of the innominate artery:—

"Violent hæmorrhage took place in my innominate case on the thirty-ninth day. It was controlled by shot-bags, and has not recurred since—that is, for sixty hours. There was an interval of nine days between the first and second bleedings, the patient on Sunday declaring that he had never felt better. He has now recovered somewhat, but I expect a fatal result. He has now survived forty-one days."

A MEDICAL ACT AMENDMENT BILL.

A BILL is passing through Parliament, unopposed, to empower the new Royal University of Ireland to choose a representative in the General Medical Council, just as the dissolved Queen's University used to do.

WE regret to hear of the death of Dr. Alexander Silver, at the comparatively early age of forty-one. He was for many years one of the physicians to Charing-cross Hospital and was lecturer on physiology at that school. As a teacher and lecturer he was assiduous and painstaking, and his class will long remember his terse illustrations, his jocosity and ready wit. For some years past, however, his health had suffered considerably. On Thursday, July 13th, he was seized with vomiting, rapidly developing into uncontrollable hæmatemesis, which carried him off on Sunday last.

WE understand that a new volume of the Classified Catalogue of the Library of the Royal Institution of Great Britain, by Mr. Vincent, the librarian, is now ready. It includes the most important works published during the last twenty-five years, placed under their respective heads, accompanied by a synopsis and indexes of authors and subjects.

THERE is a wide-spread desire among the Fellows and members of the Royal College of Surgeons of England to make some complimentary recognition of Mr. Thomas Madden Stone's long and faithful services to the College. We shall be glad to learn that the scheme has taken practical shape, and that it is sure of the success it merits.

THE numerous friends of Professor Lund, of Owens College, will be gratified to learn of his steady progress towards recovery from an operation necessitated by a poisoned wound of the finger received some four years ago. The operation was performed in London by Mr. Lister.

IT is gratifying to find the name of Dr. Mackie in the list of persons who have survived the bombardment and massacre of which Alexandria has been the scene; his house, however, is stated by *The Times'* correspondent to be completely gutted.

AT the invitation of Dr. Edward Malins, the President, on behalf of the Council of the Midland Medical Society, Dr. Andrew Clark will deliver the inaugural address, before the Society at Birmingham, next session.

THE action brought by Dr. Abrath of Sunderland against the North-Eastern Railway Company for malicious prosecution, and which occupied three days in hearing at the Durham Assizes, resulted in a verdict for the defendants.

KING'S COLLEGE HOSPITAL is now closed both to in- and out-patients, and will remain so until the commencement of the winter session.

DR. A. B. GARROD and Dr. CRICHTON BROWNE have been elected Corresponding Fellows of the New York Academy of Medicine.

TYPHOID FEVER appears to be very prevalent in several of the principal cities and towns of South Australia.

Pharmacology and Therapeutics.

PULSATILLA.

ACCORDING to Clarus, the active principle of pulsatilla is anemonin, and Broniewski has lately investigated the action of this on frogs and rabbits, and also that of the extract, tincture, infusion, and decoction of pulsatilla. All the preparations were found to possess poisonous properties. In frogs the number of respirations and cardiac contractions was lessened, in ten or fifteen minutes if the dose was large, not until the end of a day if the dose was small. The animals were dead, and sat with head bent forward and half extended extremities, and could scarcely be excited to movement by sensory impressions. Cutaneous sensibility was preserved, and so also was the excitability of the motor nerves, but the muscular irritability was lowered. The heart continued to beat after the respiratory movements had ceased. Rabbits presented initial weakness and tremor of limb, and intense apnœa, which led to death after a paralysis of the extremities, commencing in the fore-limbs. After death intense hyperæmia of the lungs was present, and signs of inflammation in the intestinal canal.

RESORCIN IN DIPHTHERIA.

Andeer, who has employed resorcin in so many diseases, has recently used it in diphtheria, and states that, in the slighter forms of the disease, a single cauterisation with crystalline resorcin, or with a concentrated ointment of resorcin in vaseline, is sufficient to arrest the formation of false membrane; but in cases of greater severity repeated applications are necessary; while in the most severe forms of the disease he recommends that resorcin should be given internally as well as applied locally. We fear, however, that his recommendation of the drug must be received with some caution, since he makes the extraordinary statement that of 222 cases treated thus, not one died. If his diagnosis of the disease was correct in one-tenth of his cases, the result would still be satisfactory. He asserts that the agent appears to be a true specific, influencing the morbid blood state as well as the local process.

SULPHUROUS ACID IN TUBERCULOSIS.

Some experiments by Froschaner on the treatment of septicæmia by sulphurous acid, suggested to Catani the trial of this agent in phthisis, and his experiments are of interest, not only from this practical aspect, but also in connexion with the discoveries of Koch. Phthisical patients were made to drink of water impregnated with it, and especially were made to breathe in closed rooms the air of which contained a considerable quantity. The experiments, continued for a considerable time, yielded the following conclusions: Most patients bear the long-continued inhalation of sulphurous acid remarkably well; only during the first few days, before

they have become accustomed to it, do they complain. All the cases thus treated became free from fever in the course of a few days, and subsequently remained so. As far as could be ascertained, the local mischief showed no tendency to increase during the treatment, and the amount of expectoration became slighter. The observations are being continued in order to ascertain how far a permanent effect can be produced.

ARSENIC.

Two French observers, MM. Caillol de Poncy and Ch. Livon, have lately experimented on chronic arsenical poisoning. The effect of the addition of small quantities of arsenic to the diet of cats was not at first to cause any disturbance in the general health; indeed, they ate more, became fat, and seemed generally to be in exceedingly good health. After a time, however, they began to lose flesh, became affected with diarrhœa, lost appetite, and became languid, and finally died in a state of anæmia and emaciation, which presented a striking contrast to their condition at the commencement of the treatment. At the necropsy all the muscles, including the heart, were extremely pale; the liver, the lungs, and the kidneys presented all the naked-eye signs of fatty degeneration, and the mesenteric glands were swollen, and also presented fatty degeneration, a lesion which has not previously been observed. In the lungs Cornil and Brault found, in acute poisoning, that the pulmonary capillaries were dilated and distended with blood, and the endothelial layers were invaded with large fatty granulations. Hæmorrhages were also seen in certain points, and many alveoli were filled by degenerated cells, giving rise to the naked-eye appearance of pale islets. The mesenteric glands appeared as large yellowish-white masses of caseous aspect. The microscope showed that the peripheral part of the glands was invaded by fatty degeneration, which was not limited to the follicles. The process of change appears similar to that in the lung: under the influence of the slowly absorbed arsenic the endothelial cells undergo fatty degeneration, commencing in the most active part of the glands—the follicular region,—from which it gradually invades the greater part, if not the whole, of the gland.

NITRATE OF SILVER.

In some experiments on chronic poisoning by nitrate of silver Rozsahegzi says that a dilute solution injected into the stomach causes rabbits rapidly to lose flesh; but the functions of respiration and the action of the heart are not disturbed until shortly before death. The pathological appearances found were redness of the mucous membrane of the pharynx and larynx, congestion and even hepatisation of the lungs, with a cell growth in the walls of the alveoli. In the cases of longest duration he found the liver shrunken, its connective tissue increased, and the cells in a state of fatty degeneration. The connective tissue of the kidney was also increased, and the epithelium degenerated. The striated muscles were also granular. Small doses raise the temperature a fraction of a degree, whereas large doses lower it. If nitrate of silver is injected under the skin it seems to be eliminated by both the intestine and the kidneys, but more speedily by the former than by the latter.

PHOSPHORUS.

Danillo, in phosphorus poisoning, has found inflammatory changes in the spinal cord, either a central or a diffuse myelitis. In acute cases the central nervous system contains accumulations of pigment proceeding from effused blood, and recent effusions may be traced in the central region throughout the entire length of the spinal cord. Small, often-repeated doses cause a very interesting diffuse inflammation of the cord. By varying the dose, both forms of inflammation may be produced, and to these changes most of the nervous symptoms observed during life may be referred.

CHINOLIN.

The physiological action of chinolin has been investigated afresh by Bach and Loimann. They made it synthetically by the method of Strauss, by heating nitro-benzol, anilin, and glycerine in the presence of sulphuric acid. The sulphuric acid withdraws the water from the products of decomposition of the three former, and leaves chinolin. A tenth of a gramme produced in rabbits a fall of temperature amounting to .3° to 1·1° C. within an hour; the fall was followed by a subsequent rise, which in many cases exceeded the original temperature. Larger doses, ·3 to ·5 gramme, caused a very considerable and permanent fall in temperature, usually ending in death. The respirations were irregular and superficial, and increased in number after small doses; ·2 to ·3 gramme rendered the animal helpless and dull, with a diminution in the reflex excitability, and ·6 to 1·0 gramme caused complete paralysis, with loss of all reflex action, and death in collapse. A cumulative action was not observed. Hyperæmia and œdema of the lungs were found after death.

THE EXHIBITION OF APPLIANCES FOR THE PROTECTION OF HUMAN LIFE.

POWERFUL patronage and a most worthy purpose have not sufficed to make this Exhibition a success. Exceptionally unfavourable weather, feeble publicity, and defects of management have all combined to reduce the number of visitors, and to occasion much dissatisfaction among the exhibitors. During the present uncertain weather, a journey to the Alexandra Palace is not particularly inviting, nor is it encouraging to find, on reaching the Exhibition, that some of the owners of the most interesting exhibits have not yet got their stalls in order or their goods in place. English sanitary appliances are very poorly represented; but this is only natural considering how recently displays of this description have been held at South Kensington and at Brighton. A novel feature was, however, promised by the advent of upwards of thirty German patentees whose inventions were to have formed part of the great sanitary exhibition at Berlin which was destroyed by fire. Unfortunately it is precisely the Germans who have in many instances failed to make good their appearance. Some of their apparatus are still in the docks, and it is doubtful if they will reach the Alexandra Palace before the Exhibition is closed. The German exhibit actually in working order, and which most readily attracts the visitor, is that of Messrs. A. Schörke and Co.'s pea sausage combined with bacon and ham. This improvement on the celebrated sausage the German soldiers used during the Franco-Prussian war weighs 18 oz., yields eight pints of thick soup, and costs only sixpence. The pea meal of which it is made contains 18·44 per cent. of albuminous substances, and the lentil meal 21·50 per cent. With such cheap and highly nutritious food at hand no one need starve. Herr Johann Scholz of Laubegast, Dresden, exhibits, together with their analysis, highly nutritive biscuits, cocoa, and chocolate made with pea, bean, and lentil flour. If such articles were in more general use they would save many poor people from the fatal consequences of insufficient food. As the Germans are renowned for their power of living on the smallest conceivable incomes, it is not surprising that they should excel in the manufacture of cheap food.

The purely sanitary appliances at the Exhibition are anything but novel. Smeaton's closets, the antiseptic closet, and Boyle's ventilating cowls hold prominent positions, but show nothing new. By the side of Lloyd's improved ventilating cowl will be found a very ingenious joint for ventilating shafts in wrought metal, which would render the displacing or leakage of the joints impossible. An outer ring or belt about four inches broad forms a socket, into which the upper portion of the pipe is inserted and soldered.

Mr. R. Adams' patent window frames and apparatus for opening fanlights are particularly useful in assisting ventilation and preventing accidents. The upper and lower part of the window can be opened and shut in the ordinary manner, or it may be opened as a louvre window; and finally, revolving on a central pivot, both portions can be brought down to the level of the window-sill, and being spread out at right angles, every corner can be reached by the servant standing on the floor of the room and polished in the same manner and with the same facility and action as the surface of a table. Further, this window is so contrived that even when partially opened it cannot be further opened from the outside, so that ground-floor rooms may be ventilated without the fear of thieves gaining access. Nor is this great improvement expensive.

In respect to ventilation, the few exhibits in this section relate rather to ships than to houses, and we failed to find

anyone present capable of giving the necessary explanation. Capt. F. L. Norton's system of ventilation by two huge bells that rise and fall in two drums is really a means of artificial breathing. The drums communicate to all portions of the ship by various pipes, the one drawing up the foul air, the other pressing forward the pure air, as the bells within the drums or cylinders rise and fall through the action of cross-beams worked by an engine. So long as the engine does not get out of order and sufficient power is used, this invention renders the greatest service, particularly if care be taken, in pumping the air in, to diffuse it, so as to avoid draughts.

The most important sections of the Exhibition are those that relate to the prevention of railway accidents and to the saving of life at sea. When we consider that about 9000 persons are killed and injured on our railways every year; that about 3000 persons are drowned during the same period of time in our docks, rivers, and inland waters; that last year the Life-boat Institution saved 1121 lives from various wrecks—the interest and importance of this subject will be readily admitted. We cannot, however, profess to criticise the various proposed improvements in the systems of brakes, signalling, &c., nor have we much to say concerning the life-buoys, floating costumes, &c., provided for sea journeys.

Another section, relating to the work in mines, is also very interesting. There are 484,933 persons engaged in mining in this country, and it is calculated that 1 in every 500 is killed, and 1 in every 368 seriously injured. In this respect the Germans have some very good safety-lamps, notably G. L. Brüchmann's patent; while among the English exhibitors, the Purdy pneumatic lock lamp seemed to us a clever contrivance.

There are various ambulance vans for public and private purposes, and the well-known exhibits of the St. John Ambulance. Many of the ambulances for civil use were so formidable in appearance, and their purpose so unmistakable, that their repeated presence in any one quarter during a season of epidemic could not fail to attract notice and occasion panic.

Among the miscellaneous exhibits we were glad to notice that of the Surgical Appliance Society for the Relief of the Crippled Poor. Here is shown the Beaufort artificial arm and leg, which are already so well known for their lightness and cheapness. Various diving and noxious gas apparatus are of great use, and particularly that of Messrs. Fleuss, Duff, and Co., which has been tried after colliery explosions and in the Severn tunnel. W. Bowden's automatic chariot for infants, in which they can stand, walk, sit, and have a table before them to play upon, is convenient and safe, and has been usefully employed for children with weak limbs. The same exhibitor has some excellent toys imported from India that cannot poison the children who put them in their mouths, and some potash soap for hard waters. Close at hand, however, will be found the formidable display of Jeyes' perfect purifying soap, and his di-infecting fluid, now well known and thoroughly appreciated. The exhibits of the Silicate Paint Company, Messrs. J. B. Orr and Co., have already been described in these columns, when reviewing the sanitary appliances at South Kensington, and we are glad to note that no effort is spared in making known to the public these most effective substitutes for the poisonous lead paints that should no longer be used.

In conclusion, we should mention that of all the exhibits, the most likely to create interest is the steel and iron compound, patented by Mr. Leighs, which has the extraordinary property of breaking up and taking the centre out of a rifle bullet. This substance is not so heavy as the armour worn by the ancients, and yet it will resist the bullet of an Enfield rifle; and for 3s. 6d. a metallic cloak can be provided to the marksmen at the rifle butts, which will save them from all danger, even if hit by the bullets. For ambulance purposes this material is invaluable, for it will now be possible to bring ambulance waggons out under heavy fire. Shields of this metal have been ordered to protect the sailors on the decks of Her Majesty's ships; while the German Government has purchased a large number of screens, which soldiers will carry in front of them and use instead of digging trenches. Should this invention prove as successful in actual warfare as the experiments that have been made would lead us to infer, there is some prospect of returning to the armour and the hand-to-hand fighting of the olden days. In any case, we shall be grateful for any portable means of protecting the medical staff and their patients from the stray bullets they so frequently encounter when in action.

WILLS AND BEQUESTS.

THE will of Joseph Salkeld Johnston, M.D., Surgeon-Major, retired, Army Medical Department, of Seal Chart, near Sevenoaks, who died on May 30th last, at Lynwood, near Penrith, was proved on the 27th ult. by Mr. Thomas Johnston, the brother, the sole executor, the value of the personal estate exceeding £24,000. Subject to an annuity of £50 to Ida Hammond, the testator leaves all his real and personal estate to his said brother.

The will of William Millett Boase, M.D., of Plymouth, who died on May 4th last, was proved on the 23rd ult. by Mr. George Clement Boase, the son, and Mr. Alfred Boase, the executors, the value of the personal estate exceeding £500. The testator disposes of his freehold house property and his personal estate in favour of his wife, his said son, and his daughter, Mrs. Edith Anna Belcher; his daughters, Mrs. Ellen Bradley and Mrs. Mary Millet, having been already provided for by appointment.

The following legacies have recently been left to hospitals and other medical charities:—Mr. George Cheesman of Neckinger-road, Bermondsey, and of Holden House, Dorking, £50 each to the Royal Sea-bathing Infirmary, Margate, and the National Hospital for the Paralysed and Epileptic, Queen-square, Bloomsbury.—Mr. Arthur Wells of Nottingham, solicitor, £500 each to the Nottingham General Hospital and the Nottingham Dispensary, and £2000 to the Edinburgh Medical Missionary Society.—Miss Margaret Trotter of 9A, Upper Brook-street, and of the Château la Rocheville, Pecq, near Versailles, £3300 Midland Railway stock to the London Homœopathic Hospital, and her property, La Rocheville, to the Civil Hospital of Saint Germain-en-Laye.—Miss Anne Arundell of Carlton-crescent, Southampton, £100 each to the South Hants Infirmary and the Southampton Dispensary.—Mr. Samuel Gurney of 20, Hanover-terrace, Regent's-park, on the death of his wife, £50 each to the Hospital for Diseases of the Skin, Stamford-street, Blackfriars, the Poplar Hospital, and the Nursing Sisters' Institution, Devonshire-square.—Mr. Lewis Lazarus of 29, Great St. Helen's, and 38, Tavistock-square, £20 to the London Hospital, Whitechapel.

MEETING OF MEDICAL OFFICERS OF HEALTH.

A COMBINED meeting of the members of the North-Western and Yorkshire Associations of Medical Officers of Health was held at Doncaster on Friday, June 30th, Mr. S. W. North, President of the Yorkshire Association, in the chair.

Mr. B. S. BRUNDELL, M.Inst.C.E. (Doncaster), read a paper on Sewer Ventilation. The great need for ventilation arose from the present defective conditions of town sewers owing to their not being constructed with sufficient self-cleansing falls. The ordinary methods, by manhole openings, by untrapped gully grates, or by pipes up the chimneys of houses, were not free from risk to the neighbouring householders. He urged that sewers should be systematically flushed, and the outfall of main sewers should be provided with falling doors to prevent wind blowing up the sewers.

Mr. MASTERS, Architect (Doncaster), read a paper on the Circulation of Air in Sewers, which he believed was generally very defective from the insufficient fall, and consequently the very slow rate at which sewage travelled through the sewers allowing of the formation of offensive gases.

Mr. J. M. FOX, Medical Officer of Health (Midcheshire), then read an able paper on Scarlet Fever in connexion with Defective Relations between the Dwelling and the Sewer. He stated that, guided by the germ theory of disease, we were constantly reminded that it was with the conditions of life itself, and not mere chemical reactions, that our sanitary investigations were concerned, and that the greatest safety against zymotic impact consisted in the removal of those conditions of putrefaction amid which these forms of life flourish. There had recently been a tendency to divorce scarlatina, as far as sanitary regulations were concerned, from some other kinds of zymotic diseases, as far as sanitary regulations were concerned; also too much attention was given to the

infection lying in the particles shed from the skin, or upon the exudations from the throat. Mr. Fox considered this concentration of energy was wrong, for two reasons: First, he considered a fortnight after the cessation of the fever the epithelium then shed after the disinfection of the skin was harmless; and, secondly, that it was a mistake to look to this as the only source, or even the principal one, which could be the most active means of communicating the disease. He had arrived at the conclusion that the germs of scarlet fever in various excretions and in the washings of infected bedding and clothing might obtain direct access to the air, to the sewers, or to drains or ashpits, wherever their domestic drains or arrangements for disposing of house refuse were not under efficient sanitary control, and to these might be traced outbreaks of scarlet fever. He would therefore consider that sufficient attention was given to isolation and the thorough disinfection of all secretions before they were consigned to the ashpit or the sewer, both during the fever and for a fortnight afterwards. He also believed that the withdrawal of sewer air from houses and the removal of filth before any retrocedent changes took place had as direct and important a bearing upon liability to outbreaks of scarlet fever as to those of other diseases more exclusively identified with poisonous changes in excreta.

Dr. J. MITCHELL WILSON, Medical Officer of Health (Doncaster), also read a paper on the Ventilation of House Drains. He affirmed that houses ought to be more effectually cut off from waves of sewer air passing along the house drains than any water-trap could possibly do. After explaining the defects usually found in the connexions of house drains and their influence in causing outbreaks of disease, the model by-laws of the Local Government Board relating to the ventilation of house drains were discussed. A hearty approval was given to the suggestions, whereby at least two openings are required at the opposite extremities of all house drains, thereby ensuring not only an outlet for foul air, but also a constant current of fresh air through the drains.

A very interesting discussion took place on the reading of the papers.

ASSOCIATION FOR THE ADVANCEMENT OF MEDICINE BY RESEARCH.

THE following are additional subscriptions since the last announcement:—

	£	s.	d.		£	s.	d.
Dr. Cholmeley	2	2	0	Dr. Donkin	1	1	0
Mr. Prescott Hewett	52	10	0	Dr. Bowles (Folkestone) ...	5	0	0
Dr. Ball (Worcester)	1	1	0	Dr. Lucas (Bombay Army)	1	1	0
Mr. Clinton Dent	5	5	0	Dr. Balthazar Foster... ...	20	0	0
Mr. Laidlaw Purves	5	5	0	Dr. Andrew Clark	100	0	0
Dr. Wilson Fox	10	0	0	Dr. J. F. Payne	10	10	0
Dr. C. J. B. Williams... ...	10	10	0	Dr. Arthur Gamgee	2	2	0
Dr. Burke Shepherd	5	5	0	A Friend (Boston, U.S.A.)	1	0	0
Mr. John Marshall	10	10	0				

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

DR. BLAXALL'S REPORT ON NORTH AND SOUTH TAWTON.

North and South Tawton lie within the district for which the guardians of the Okehampton Union act as rural sanitary authority. *North Tawton* has a population of about 1868; and there were found in it by Dr. Blaxall conditions, both general and local, which were, in a flagrant degree, prejudicial to health and specially favourable to the spread of such a disease as enteric fever. These conditions included badly constructed and ill-ventilated drains and sewers, unwholesome closets and privies, and polluted wells. The precise connexion of enteric fever with some of these conditions was clearly made out. One outbreak was occasioned by the use of water from a well which had become poisoned by the specific evacuations of an enteric fever patient, whose soiled linen had been washed in a sink under the pump, whence soakage into the well took place; and the fact affords another proof of the imperative necessity which exists for dealing separately and guardedly, whether in a laundry or elsewhere, with all linen from infectious patients. Another condition favouring the spread of infection was found in the circumstance that the water-mains were in direct communication with the waterclosets in such a way as to facilitate the suction of foul air, and even of excremental matters, into the water-pipes. We fear that, notwithstanding numerous warnings, this highly injurious system of supplying waterclosets direct from the main, and without the intervention of a cistern, is far more common than is supposed. *South Tawton* lies in an open position on Dartmoor, and, although swept by fresh breezes, and having near at home an abundant supply of excellent water, it has been subject to prevalences of the same disease, and this notwithstanding the fact that its numerous excremental nuisances, which afford such peculiar facilities for the spread of the infection, have been pointed out by the former and the present medical officers of health, Dr. Blyth and Dr. Ash. A properly constructed privy to each house, together with some surface channel for drainage, seem to be the principal needs. There ought to be no difficulty in securing their provision.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Belfast.—During the five weeks ending June 24th the births registered amounted to 709, and the deaths to 449. The average death-rate from all diseases was 22·4; from lung affections 8·5; and from zymotic diseases 2·4, out of which small-pox showed a rate of ·4. Dr. Browne in his monthly report states that the decrease which has taken place in the cases of typhus fever and small-pox is satisfactory, and leads to the fair inference that the fever which in May had a tendency to spread will not now assume an epidemic form, and that the small-pox which has prevailed for upwards of a year is slowly passing away.

Cork.—For the four weeks ending June 17th the births numbered 152, being equal to 23·09 per 1000; and the deaths to 90 or 14·93. Omitting the deaths of fifteen persons in the workhouse, and therefore outside the borough, who formerly had resided in the city, the urban death-rate was as low as 12·44.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5718 births and 3121 deaths were registered during the week ending the 15th inst. The annual death-rate in these towns, which in the two preceding weeks had been equal to 19·1 and 18·1 per 1000, was last week 18·4. The lowest rates in these towns last week were 14·1 in Norwich and Brighton, 14·9 in Birmingham, and 15·0 in Derby. The rates in the other towns ranged upwards to 23·7 in Bradford, 24·4 in Salford, 25·1 in Liverpool, and 26·0 in Leicester. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 536, and exceeded by 66 the number returned in the previous week; 218 resulted from diarrhœa, 112 from whooping-cough, 83 from measles, 57 from scarlet fever, 44 from "fever" (principally enteric), 12 from diphtheria, and 10 from small-pox. The lowest death-rates from these diseases occurred in Norwich and Brighton, and the highest death-rates were recorded in Nottingham and Leicester. Whooping-cough showed the largest proportional fatality in Sunderland and Birkenhead; measles in Plymouth; scarlet fever in Derby and Hull; and "fever" in Hull. The fatality of diarrhœa, though still considerably below the average for the season, showed a marked excess in Leicester. The deaths referred to diarrhœa in the twenty-eight towns, which had been 70, 96, and 140 in the three preceding weeks, further rose to 218 last week, and were equal to an annual rate of 1·3 per 1000. The 12 deaths from diphtheria in the twenty-eight English towns were fewer than those returned in any previous week of this year, and included 8 in London and 2 in Portsmouth. Seven deaths were referred to small-pox in London and its suburban districts, 4 in Nottingham, one in Leeds, and one in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which in the eleven preceding weeks had declined from 350 to 214, further fell to 204 on Saturday last; 23 new cases of small-pox were admitted to these hospitals during last week, against 29 and 30 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had been 212 and 173 in the two preceding

weeks, rose to 199 last week, and exceeded the corrected weekly average by 12. The causes of 74, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Leicester, Nottingham, Derby, Bolton, and Cardiff, while the proportion of uncertified deaths was largest in Preston, Salford, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 21·9 and 20·5 per 1000 in the two preceding weeks, rose again to 21·3 in the week ending the 15th inst., which exceeded by 2·1 the mean rate last week in the twenty-eight large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns were 111 last week, and exceeded by 20 the number returned in the previous week; they included 56 from diarrhœa, 20 from measles, 14 from whooping-cough, 9 from diphtheria, 7 from "fever," 5 from scarlet fever, and not one from small-pox. The death-rate from these principal zymotic diseases averaged 4·7 per 1000 in the eight towns, and was 1·4 above the mean rate from the same diseases in large English towns. The 56 fatal cases of diarrhœa showed a further increase upon recent weekly numbers, and exceeded by no fewer than 36 the number returned in the corresponding week of last year; 32 occurred in Glasgow and 6 both in Dundee and Paisley. The mean death-rate from diarrhœa in the Scotch towns was last week nearly twice as high as that which prevailed in the English towns. The 14 deaths from whooping-cough in the Scotch towns showed a further decline from recent weekly numbers, but included 8 in Glasgow and 3 in Edinburgh. The fatal cases of measles, however, rose to 20, of which no fewer than 14 occurred in Dundee. The 9 deaths referred to diphtheria included 7 in Glasgow and 2 in Greenock; and 3 of the 5 fatal cases of scarlet fever occurred in Glasgow. The 7 deaths from "fever" showed a further decline from recent weekly numbers; 3 were returned in Edinburgh and 2 in Glasgow. The most noticeable feature of the week's returns is the excessive fatality of measles in Dundee; the deaths from this cause in this town, which had been 2, 8, and 4 in the three preceding weeks, rose to 14 last week. The deaths referred to acute diseases of the lungs in the eight towns, which had declined from 111 to 92 in the three previous weeks, were 95 last week, and were within 3 of the number attributed to these diseases in the corresponding week of last year.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which in the three preceding weeks had declined from 23·2 to 20·5, further fell last week to 16·8, a lower rate than has been recorded in any week since August, 1881. During the thirteen weeks of last quarter, however, the death-rate in the city averaged 26·8 per 1000, against but 19·5 in London and 20·5 in Edinburgh. The 112 deaths in Dublin last week showed a decline of 25 from those returned in the previous week, and included 5 which were referred to diarrhœa, 2 to measles, 2 to "fever," and not one either to small-pox, scarlet fever, diphtheria, or whooping-cough. Thus 9 deaths resulted from these principal zymotic diseases, against 14 in each of the two previous weeks; these 9 deaths were equal to an annual rate of but 1·3 per 1000, against 3·6 in London and 2·7 in Edinburgh from the same diseases. The 5 deaths attributed to diarrhœa corresponded with the number in each of the two preceding weeks. The 2 fatal cases of "fever" were 4 less than those returned in the preceding week. The two deaths from measles were the first returned since the commencement of the current quarter; in the first two quarters of this year, however, the fatal cases of this disease recorded in Dublin were 432 and 119 respectively. The causes of but 4, or 3·6 per cent., of the deaths in the week were uncertified.

BIRTHS AND DEATHS IN IRELAND.

During the quarter ended March 31st last, there were registered in the 801 Registrars' Districts in Ireland, 32,686 births, a number equal to 25·7 per 1000; and 24,873 deaths, representing an annual rate of 19·6. The returns for the quarter were of a very favourable character, the deaths being below those recorded in the corresponding quarter of last year to the extent of 3863, and the death-rate 2·1 lower. The death-rate has not been so low at this period of the year since 1874. With the exception of the prevalence and fatality of measles in Dublin, and small-pox in Belfast and Waterford, there is nothing worthy of special notice in the returns.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Brigade Surgeon Robert Augustus Chapple to be Deputy Surgeon-General, vice J. Gibbons, C.B., granted retired pay; Surgeon-Major James Landale, M.D., to be Brigade Surgeon, vice R. A. Chapple; Surgeon Daniel O'Sullivan has been permitted to resign his commission.

ARTILLERY VOLUNTEERS.—1st Devonshire: Acting Surgeon Arthur Benjamin Ewen resigns his appointment.

ENGINEER VOLUNTEERS.—1st Flint (Buckley): Edward Williams, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Cheshire: Acting Surgeon Isaac Byerley resigns his appointment.—17th Lancashire: Garnett George Tatham, Gent., M.D., to be Surgeon.—1st Linlithgowshire: Lieutenant James Hunter resigns his commission.—5th (West) Middlesex: Lieutenant Samuel John Wright to be Captain.—7th Middlesex (London Scottish): James Cantlie, Gent., M.A., M.B., to be Acting Surgeon.—8th Surrey: Richard Clement Lucas, Gent., M.B., to be Surgeon.

ADMIRALTY.—Staff Surgeon John Black Nicoll, M.D., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet, with seniority of July 8th, 1882.

The following appointments have been made:—Fleet Surgeon John Breakey, to the *President*, additional, the appointment of Carr having been cancelled; Surgeon Thomas D. Popham, to the *Indus*; N. F. Hele, to be Surgeon and Agent at Orfordness in addition to Aldborough, vice Place; Surgeon John J. Dinnis, M.D., to the *Hibernia*, additional, for temporary service at Malta Hospital; James Mill to be Surgeon and Agent at Fifeness.

Correspondence.

"Audi alteram partem."

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—In your article on the recent election at the College of Surgeons you rightly remark that the prospects of the representatives of the smaller schools are not exhilarating. Nevertheless, having survived my late defeat, I intend to come forward again next year, because I think that our smaller schools should be represented on the Council. In the meantime I hope you will again advocate what I believe to be the wish of the majority of the Fellows, that at these elections the votes of the Fellows should be taken by proxy instead of by ballot. If anything would prevent me from again coming forward as a candidate for the Council it is knowing that by so doing many Fellows who might wish to support me must be put to expense and inconvenience by having to vote in London. There are, however, other reasons why the election of members of the Council should be carried on by proxy. It is frequently impossible for men engaged in active practice to leave their patients for the day and come up to town to vote, so that in existing circumstances these Fellows are practically excluded from exercising their legitimate privileges. Again, if a rising feeling of discord on this matter between provincial and metropolitan Fellows can be averted by altering the system of voting, it must be advisable to make some such change as soon as possible. I am aware that the system advocated may not prove advantageous to the representatives of the smaller schools; I am convinced, however, that the principle is sound, and that the less fettered Fellows are as regards their power of voting the stronger will be the Council they elect. If these are the opinions held by the majority of Fellows on this subject, it is only necessary to represent the matter through the constituted authorities, and in proper form to the Privy Council, in order that we may secure an altera-

tion in the charter of the College. Proceedings of this kind, however, are expensive; it remains to be seen if any large number of Fellows (especially the provincial ones, for it chiefly concerns them) are willing to subscribe a sufficient sum of money to defray the necessary legal proceedings. The Council of the College of Surgeons can hardly be expected to recommend that the funds at their disposal should be expended in obtaining a new charter. It was, I think, upon these grounds the Council declined not long since to work in this matter. I am, Sir, yours truly,

Grosvenor-street, W., July 17th, 1882. C. MACNAMARA.

THE SHAFT SYSTEM OF SEWER VENTILATION.

To the Editor of THE LANCET.

SIR,—The adoption by the Town Council of Brighton of the plan of inducing sewer gas to escape into the air by means of funnels up the sides of houses induces me to mention a particular instance of the good effect of the system in this neighbourhood. About six years ago a street of colliery houses had been "favoured" at intervals with sudden outbreaks every hot summer during the previous ten years. The cause was easily ascertained. An enclosed drain, with the usual stench-traps, was within seven feet of the beds where the whole of the inhabitants slept. Every year there were several deaths from typhoid fever. Various plans were adopted: washing out the drains with pure water from a distance, brought in water casks, pulling down all outlying erections, &c. The results, although beneficial to a certain extent, were by no means satisfactory, and it was seriously proposed to take up the sewage-pipes and stench-traps and leave the place without any drains at all. In this state of matters the manager of the colliery proposed to erect a brick chimney at least thirty feet high, communicating with the drains, with the view of drawing the sewer gas away from the houses and dissipating it in the atmosphere at a considerable height. This was agreed to and carried out. During its erection the workmen frequently complained of the stench rising through the funnel of the tall chimney. This chimney was completed five years ago, and from that time to the present there has not been a single case of typhoid fever in the street. Still more, a colliery belonging to the same owners, four miles away, owing to its position and the houses being huddled closely together on the banks of a tidal river, charged with the filth of some uplying towns, was in summer time a focus for the germination of fever, deaths being common from it. The plan so successful in the street I write about was adopted, and, so far as can be judged in the time, the success has been similar. It appears to me that the plan of tall chimneys, like factory chimneys, adopted in large towns, in conjunction with the usual system of flushing with water, indicates a method likely to result in great sanitary success in the future. Funnels up the sides of houses evidently carry the gas to no great distance into the atmosphere, and the upper storeys and bedrooms of the town will receive the "benefit" of the plan, whatever that may be, whereas by carrying the poisonous gas fifty or possibly a hundred feet into the air excellent results are certain to accrue.

I am, Sir, yours truly,

ALEXANDER TROTTER, M.D.

Blyth, Northumberland, July 17th, 1882.

PUERPERAL CONVULSIONS: ARTIFICIAL RESPIRATION SUCCESSFULLY USED.

To the Editor of THE LANCET.

SIR,—So far as I am aware the matter treated in the following lines is new, and may be regarded as of sufficient public interest and utility to merit being placed on record in your pages:—

On June 18th I attended A. P——, aged twenty-two, a primipara. She was of a stout, florid, and somewhat apoplectic appearance; and, as I afterwards learned, more than one of her family (including her mother) had had "a stroke." She seemed in good health and spirits, but as the os was only very slightly dilated, I retired after giving a few general instructions, and telling the nurse to send for me when matters were more advanced. Next morning at 8 o'clock I was sent for, and on arrival found the head well in the pelvis. The pains were strong and regular; but after waiting about three hours, and finding no perceptible progress, I applied forceps. After half an hour's hard traction during the pains, which were very frequent, there did not seem to be the slightest progress, and I was deliberating as to further measures, when I noticed that her limbs were quite rigid. Looking at the face I found her in a strong convulsion, and the face almost black, the rest of the body rapidly assuming a dusky hue. I at once looked for my chloroform bottle, which, however, had been removed from my bag. There was no time to be lost, as she appeared every second to be getting more rigid and the asphyxia more marked, so I instantly removed the forceps, turned her on her back, and proceeded vigorously to apply artificial respiration. The effect was as gratifying as it was rapid; the thorax began to take part in the work of respiration, the cheeks and lips to regain their colour, and a deep sigh resulted in an almost sudden return to her natural appearance. The spasms ceased, and she rapidly regained consciousness, being, however, confused, and her speech being thick and inarticulate. I allowed the labour to proceed without further interference (dreading a return of the convulsions) for about two hours longer, when, there being no sign of progress, I reluctantly decided to give the forceps one more trial. This time it was successful, and in half an hour the head was born. I took off the forceps, and was giving her a little rest, when suddenly she was again seized with a convulsion. I immediately extracted the child, and, placing the patient once more on her back, recommenced artificial respiration, and with equally satisfactory results. The patient made a good recovery without further mishap.

I am not aware that this method of treatment has been adopted before. I can find no reference to it in any of my text-books, and it appears to be new to all medical friends to whom I have mentioned it. The *rationale* of the matter would appear to me to be that the convulsion was caused by reflex irritation throwing off its balance the nervous supply of the respiratory muscles (or, what is practically the same thing, the respiratory centre), which balance was restored by the process of artificial respiration.

Yours, faithfully,

K. W. MILLICAN, L.R.C.P., &c.

Kineton, Warwick, July 19th, 1882.

"THE OPERATION OF 'SPAYING' IN WOMEN."

To the Editor of THE LANCET.

SIR,—Your comments on Mr. Lawson Tait's position and procedure in relation to the case of Mrs. A——, narrated in my letter which you kindly inserted in your issue of July 8th, and the inference of necessity suggested thereby, are certainly, in my opinion, unfair to that gentleman; for if removal of the ovaries in Mrs. A——'s case was unjustifiable from any point of view, it is I, and not Mr. Tait, who is in fault. He operated as a skilled surgeon under my direction as medical attendant on the case. I laid before the patient and her friends the risks, both immediate and remote, and the impossibility of pregnancy subsequent to it; and I made no promise that complete restoration to health would follow; but I strongly expressed the opinion, based on several years' attendance on her, that the ovaries were in a state of chronic disease, from which nothing but removal would relieve them. That this opinion was well founded no one who saw them after removal would for an instant doubt. Having thus clearly defined the position taken by Mr. Tait and by myself in this case, the question which arises from your editorial comments is undoubtedly this: Given a patient under the climacteric age, with a history of twelve years' suffering, including several severe attacks of ovaritis; menstrual period most irregular, sometimes with six or eight months' interval, often with delirium and hallucinations at its recurrence, sleeplessness, emaciation, and entire incapacity for any duty or pleasure—is it, or is it not, justifiable to remove the organs which it is believed are the seat of disease and the cause of ill-health? It is easy to be wise after the event, and to say at the post-mortem, "If this woman's ovaries had been removed she might have lived." To my mind, credit, rather than reproach, is due to the advisers and operator who, recognising the disease, and, as they believe,

the only remedy, prevent the need of that autopsy. Many besides myself will take exception to the vague and undefined expression used in your comment on Mr. Tait's letter of July 1st—namely, "We mean the operation Mr. Tait has been performing for some time past." Permit me to say, Sir, that thoughtful and unprejudiced men will attach but little value to such a general accusation, unsupported by reference to any particular case, or class of cases; and I would respectfully ask you, Sir, in justice to Mr. Tait and to your readers, to explicitly indicate the cases you refer to; and if in the case of Mrs. A—— you would inform me as to what alternative should have been adopted in place of operation I and, I feel sure, many others will be most grateful for the instruction.—I am, Sir, yours faithfully,

Milford, Hants, July 12th, 1881. DOUGLAS W. ESHELBY.

*** We are very reluctant to prolong this discussion; but we must demur to Dr. Eshelby's contention as to the responsibilities of practitioners in operations. The circumstances of any case must be very exceptional and peculiar that can justify a surgeon, however skilful, in undertaking the performance of an operation against his deliberate judgment.—ED. L.

SMALL-POX AND VACCINATION.

To the Editor of THE LANCET.

SIR,—Referring to your remarks in last week's issue of THE LANCET on this subject, will you allow me to state that the evidence which my predecessor, Mr. Marson, gave before the Select Committee on the Vaccination Acts in 1871—viz., that no nurse, servant, or other official of this hospital had ever suffered from small-pox during his tenure of office, then a period of thirty-five years—still holds good, making now forty-six years in which the *employés* of this hospital have enjoyed absolute protection from this disease. Since I was appointed surgeon to the hospital no patient has been engaged here either in the capacity of nurse or servant, and, so far as I can gather, it has always been the exception to engage patients. The number of those in the service of the hospital who have been protected by previous attacks of variola I should estimate at about 7½ per cent. I cannot pretend to explain the extraordinary immunity thus enjoyed, I am simply desirous of adducing facts; I cannot but attribute it largely, however, to the circumstance that there has been throughout the period alluded to a station for gratuitous vaccination in connexion with the hospital, so that the surgeon is not dependent on extraneous sources for his lymph supply, and thus only uses for his revaccinations lymph of the activity of which he is absolutely assured.

I am, Sir, yours obediently,

HERBERT GOUDE, F.R.C.S. Edin.

Small-pox and Vaccination Hospital, Highgate-hill, Upper Holloway, N., July 18th, 1882.

DISLOCATION OF FOOT BACKWARDS.

To the Editor of THE LANCET.

SIR,—It may be of interest to record that on June 10th last I met with a case of dislocation of the foot backwards, exactly similar to that mentioned by Mr. Ashmead in this week's issue of THE LANCET. The patient when running caught the heel of his boot on the edge of the kerb, the foot being thus suddenly stopped while the body was still carried forwards. I saw him about half an hour after the injury, which was on the right side, and found a well-marked dislocation of the foot backwards. The lower end of the tibia could be seen prominent on the dorsum of the foot, the tendo Achillis standing well out in relief and raising the heel. In this case also the fibula was fractured at the lower end. Reduction was fairly easily effected without chloroform, and for the first few days the leg was put up in lateral wooden splints, afterwards in plaster-of-Paris.

I am, Sir, yours, &c.,

HENRY N. HOLBERTON, L.R.C.P. Lond., &c.

Eastbourne, July 8th, 1882.

THE funds of the Wolverhampton and Staffordshire Hospital have just been augmented by the gift of £1000 by a member of the weekly board of the hospital.

SCOTTISH NOTES.

(From our Correspondent.)

DR. GEORGE DICKIE, ex-Professor of Botany in the University of Aberdeen, died at his residence in that town on Saturday last. The deceased gentleman was educated wholly at Aberdeen, where, after graduating, he commenced practice. Routine medical work proving uncongenial, he devoted himself entirely to the study of natural science, and was soon successful in obtaining the Botany Chair in the Belfast College. On the amalgamation of King's and Marischal Colleges, in 1860, Dr. Dickie was appointed to the same position in the University of Aberdeen, and he held this office till his retirement, from ill-health, in 1877. Though scarcely a brilliant lecturer, his students felt that he had a deep knowledge of his subject, and the devotion to science which he imparted was, perhaps, better than many dry facts. While an enthusiastic botanist, he felt that his favourite pursuit need have but a subsidiary part in the equipment of a practical physician, and hence his objection to remit a man to his studies who showed a good acquaintance with the more purely medical subjects. His students gave him their warm personal regard, and his death, though at an advanced age, will be keenly felt by many of them.

I regret to hear that Dr. Alex. Ogston, who has already been laid aside for about three months, is still unable to resume work. He purposes visiting the Continent shortly to recruit.

Though the zymotic death-rate has not been markedly heightened as yet, the returns of the various authorities show that Aberdeen, Dundee, and Perth are at present suffering from epidemics of measles, typhus, and typhoid fevers respectively. In the northern city the medical officer states that the epidemic of measles "has quite got over the sanitary staff," and typhus has made several attempts to break out. In Dundee during last month over 400 cases of zymotic disease were notified, the large majority being measles, but about twenty cases of typhus were included. In a town with such a sick-rate the authorities gravely consider whether £150 is a sufficient salary for their medical officer of health. It will be a misfortune to the town if a short-sighted parsimony debars it from obtaining the services of a first-rate man. The Perth people labour under the peculiar hallucination that pure water can be obtained from the river just after their whole sewage is thrown over the filter-bed, while strangers wonder that typhoid fever is ever absent. The Board of Supervision recently sent an inspector to inquire into the truth of certain severe strictures which had been passed upon the Police Commissioner, and as the result of that gentleman's investigations goes to support the outside criticism, both the authorities and the medical officer have written elaborate reports which go to prove that they have not been wholly unmindful of health interests. The result of all this will probably be that the sewage will be carried so far down the river that it will no longer prove so serious a nuisance.

IRELAND.

(From our own Correspondent.)

A PUBLIC meeting of the Senate of the Royal University of Ireland was held last week for the purpose of conferring degrees. At the close of the proceedings the Vice-Chancellor of the University, Lord O'Hagan, said it gave him the greatest pleasure to meet the first graduates of the university. He wished them every prosperity in their future career; and he felt confident that they would do honour to their university, and to the noble profession which they had embraced. A tolerably large number of candidates presented themselves at the recent examinations, and there would have been more were it not for a misunderstanding in relation to some of the regulations of the new university.

The annual report of the Richmond District Lunatic Asylum for the past year shows that during 1881 there were 1446 inmates under treatment, of whom 424 were admitted during the year. The deaths numbered 158, three being cases of suicide; and the percentage of deaths on the total

number in the asylum was equal to 10$\frac{2}{3}$$\frac{3}{4}$. As regards the social condition of the 1039 lunatics in the asylum on the last day of December, 198 were married, 638 single, 47 widowers and widows, and in 156 instances it was unascertained. The remarkable discrepancy which exists between the numbers of married and single inmates of asylums in Ireland has often attracted attention, but no satisfactory explanation has ever been attempted. Dr. Lalor, the medical superintendent, states that his experience of the past year, as of former years, has confirmed his confidence in the advantages of treating the insane in large, in place of small, asylums, and in a few large classes or divisions instead of numerous small classes. Restraint, and the instruments for its infliction, have been totally disused—indeed, have been unknown—since his appointment, in 1857, and the education, employment, and amusement of the insane in large associated classes have more and more come to the front as preferable methods to the isolation and non-occupation, which were at one time thought necessary, or even desirable.

Last week Mr. John Ryall, a student of the Rotunda Lying-in Hospital, Dublin, was accidentally killed by a bullet from a revolver which he was in the habit of carrying, and which in some way exploded. The bullet entered the right groin, and death occurred from haemorrhage. The foolish custom of carrying revolvers prevails to such an extent at present in Dublin that it is surprising more accidents have not resulted from this cause.

A death from lightning took place at the Curragh a few days since. Private Harris was struck on the left side, and his uniform from the breast down to his foot was completely torn away, one of his boots being rent in pieces. Death was instantaneous; but a comrade who was with him at the time and was also struck by the lightning is under treatment at the hospital.

The annual report of the Cork Maternity Association shows that upwards of 400 women were relieved last year at the small outlay of some £120. It was stated at the annual meeting that in proportion to the population of the town the Cork Maternity relieved more women than any other similar institution in the kingdom, and that the percentage of deaths was one of the lowest recorded. These are claims for increased support, and it is to be hoped that this year the receipts may not fall short of the expenditure, as was the case, I regret to say, last year.

The last victim to agrarian outrage in Ireland is a Mrs. Connell, who resided near Claremorris. Her cowardly assailants, concealed behind a hedge, fired on the deceased and a bullet penetrated the wrist. Tetanus supervened and death resulted.

The recommendation of the Public Health Committee, and of the committees appointed by the North and South Dublin Board of Guardians, to abolish the port hospital ship, has been confirmed by the Dublin Corporation.

PARIS.

(From our Special Correspondent.)

WITH Amadée Latour a medical writer of no small interest has passed away. Following in the steps of Reveillé-Parise, and Poiseuille, Latour devoted himself especially to the *Feuilleton*, a chatty anecdotic review of current events, and his *causeries* have always contributed in a large measure to the popularity of the different journals with which he has been connected. After successively editing the *Journal Hebdomadaire*, the *Presse Médicale*, and the *Journal des Médecins Praticiens*, he was appointed in 1847 to the direction of the *Union Médicale*, and filled this post until a few months since, when he was obliged, through ill-health, to relinquish work. Amadée Latour was an easy and productive writer. Under the pen-name of "Docteur Simplice," his Saturday *feuilletons* formed one of the chief attractions of the *Union Médicale*, and besides these he was in the habit of contributing a large number of leading articles, reports of learned societies, and bibliographic notices. This superabundance of editorial work for a publication which appears three, and sometimes four, times a week, whilst it made him an accomplished journalist, accounts for the paucity and mediocrity of his other productions, which consist only of a few notes and memoirs, now almost entirely forgotten. The chief of these is a treatise on the Preservative and Curative Treatment of Phthisis. But it is not only as a medical reviewer that Amadée Latour will be remembered. He was the founder of the Association Générale des Médecins de France, and it is mainly due to his constancy in advocating the cause that the useful institution owes its present prosperity. He was rewarded somewhat late in life by the cross of the Legion of Honour, and the Academy of Medicine had the good sense to elect him to sit amongst its members.

The last number of the *Gazette Hebdomadaire* contains an article by Dr. A. Dumas upon the efficacy of fumigations of ox-gall in cases of acute hemeralopia. This treatment is by no means new; for, as the writer points out, it dates back as far as Hippocrates, and possibly even before his time amongst the Chinese. But, like a good many other useful methods, it has been superseded in modern practice. A recent writer upon ocular therapeutics (De Wecker) makes no allusion to it. Dr. Dumas reminds his readers that it was a favourite remedy with Fonssagrives, and the observations which he publishes certainly endorse its value. It may be mentioned that some indications concerning the use of ox-gall are to be found in the Medical Digest by Dr. Neale.

M. Hillairet read a report at the Academy of Medicine on the isolation of children suffering from infectious diseases. He recommends that a definite period of separation be fixed for each disease, and that no child be allowed to return to school after an infectious illness without a medical certificate that the period of probation has been passed. The conclusions are as follows:—(1) Children affected with varicella, variola, scarlatina, measles, diphtheria, or mumps, should be strictly isolated from their comrades. (2) The period of isolation should be forty days for variola, diphtheria, scarlatina, and measles, and twenty-five days for varicella and mumps. (3) The convalescent should be well combed before he returns to his playmates. (4) The clothes worn at the beginning of the illness should be heated in an oven to 90° Centigrade, submitted to sulphurous fumigations, and properly cleaned. (5) The bedding, curtains, furniture, and walls of the sick room should be washed, aired, and disinfected. (6) Any child who shall have suffered from any of the affections before mentioned, must produce a medical certificate that these requirements have been complied with before he be allowed to return to school.

M. Bourrel, a veterinary surgeon of Paris, proposes to prevent the transmission of hydrophobia by rendering the teeth in dogs similar in shape to those of the herbivora. He says that the latter animals never transmit rabies, because the free extremity of the tooth is blunt, and merely compresses the epidermis, without lacerating it, whereas the canine and incisive teeth of the dog cut into the tissues. The slight operation necessary for this purpose is most simple, and can be performed in a few minutes. It gives rise to no disturbance at the time, and does not interfere with future dentition. M. Bourrel states that he exposed his hand, covered by a glove as a precaution, to a rabid dog that had been subjected to the operation. The animal immediately seized hold of it and bit for some time. When it let go the glove was whole, the bite having only produced an indentation. *Faute de mieux*, the experiment is worth a trial.

M. Martineau continues to use hypodermic injections of ammonio-mercuric peptone on a large scale in the treatment of syphilis. During the last fourteen months he has made 11,000 injections in 600 patients, without producing any inflammation, abscess, or other bad symptom. He says that neither mercurial cachexia nor salivation is to be feared when mercury is administered in this manner, as it is rapidly excreted by the kidneys. Under the influence of this treatment the blood-cells increase in eight days to the normal (four to five millions), and there is a gain of weight to the amount of from one to five kilogrammes. A speedy result is obtained in cases of iritis and irido-choroiditis. M. Luton of Reims uses metallic mercury in the same manner. He injects by means of a gutta-percha syringe, provided with a steel needle, five or six drops of mercury into the substance of muscles of the thigh, the acidity of these structures ensuring its absorption.

Whatever the French peace-at-any-price politicians may think of the change of front of the Government, French subjects abroad are likely to approve of the manly policy adopted by M. Freycinet. In medical circles there is a strange story going the rounds about a fatal accident which occurred lately in Constantinople in consequence of an error in prescribing. The Turkish authorities, getting wind of the

matter, summoned the three consultants and the chemist to answer the charge of wilful murder. Two of the medical men and the chemist referred at once to their consuls, and the charge was forthwith changed into one of manslaughter. The third, a French physician, after vainly attempting to obtain help from the representative of his Government, thought it best to fly, and escaped in a boat to Varna at the risk of his life. This case would seem to show that there is more virtue in ironclads than conferences. It is difficult to conceive of an Englishman being obliged to fly from a country with which his Government was at peace because his consul was unable to shield him from the consequences of a false accusation.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons on Thursday, the 13th inst., a petition for exemption of medical men from the carriage duty was presented from the Vale of Clwyd; and a petition for redress of grievances was presented from a number of militia surgeons. The North of Ireland Branch of the British Medical Association petitioned in favour of the Union Officers' Superannuation (Ireland) Bill.

Vaccination Inquiry at Norwich.

Mr. Dodson stated, on Friday, in reply to Mr. P. A. Taylor, that Dr. Airey, one of the Local Government Board inspectors, was holding an inquiry at Norwich into the allegations connecting the death of four children and the illness of four others from the effects of vaccination. The parents would not be allowed to be legally represented at the inquiry, but a full opportunity would be given them of making their own statements.

A return was presented, on the motion of Mr. Ecroyd, showing the hours of labour and the regulations for factories in foreign countries. A return was ordered, on the motion of Mr. Hibbert, of copy of the annual report of the Assistant Commissioner of the Police of the Metropolis for the year 1881 relating to the Contagious Diseases Acts.

Pollution of the Thames.

On Monday, Sir G. McGarel Hogg, in reply to Mr. Briggs, stated that the Metropolitan Board of Works had decided upon enlarging the sewage reservoir and outfall at Barking, with the view of obviating the necessity which had sometimes arisen of turning sewage into the river before high water; but since the appointment of the Royal Commission of Inquiry, the Board had postponed proceeding with the works for three months.

Treatment of Irish Prisoners.

Mr. Trevelyan, replying to Mr. Sexton, stated that the account of the treatment of eleven prisoners in Galway, which was referred to in last week's LANCET, was exaggerated. The men all had frieze coats to protect them from the weather, and although it was necessary to secure them in a strong room, they were not refused water, and they had also bread-and-butter given them. There was no confirmation of the allegation that one of them fainted from want of air.

A petition was presented from Dublin for inquiry into the case of militia surgeons. A petition was presented from Mr. John Smith for inquiry into private lunatic asylums.

The Royal University of Ireland and the Medical Council.

Dr. Lyons moved the second reading of the Medical Act, 1858, Amendment Bill.—Mr. Serjeant Simon objected, as it was past the hour when opposed business could be taken. —Dr. Lyons, however, persuaded the hon. member to withdraw his objection, by pointing out that the object of the Bill was simply to authorise the Royal University of Ireland to elect representatives to the Medical Council, and that it had the assent of the Government, and of the right hon. gentleman opposite who represented Dublin University. —The Bill was then read a second time.

On Tuesday, a petition in favour of the Infectious Diseases Notification Bill was presented from Sleaford.

The Contagious Diseases Acts.

On Wednesday, Mr. Stansfeld presented a number of etitions in favour of the repeal of these Acts. One of the petitions, he said, was signed by a majority of the members of the medical profession in Belfast. The right hon. gentleman afterwards moved the second reading of his Bill for repealing the Acts in question, and in the course of his speech declared that from a hygienic point of view they were the greatest imposture ever known.—Mr. Childers moved the "previous question," on the ground that the Select Committee had not yet reported, and this was supported by Sir S. Northcote and Mr. O'Shaughnessy.—The previous question was agreed to, and the Bill accordingly dropped.—In anticipation of the somewhat unsavoury character of the debate, an attempt was made by one or two hon. members to clear the ladies' gallery, but it was unsuccessful, and a considerable number of ladies, presumably members of the Association for the Repeal of the Acts, remained to listen to the speeches.

On Thursday, a petition was received from Halifax in favour of the Infectious Diseases Notification Bill.

Mr. Moore's motion for a return of emigrant ships and their medical officers, which has been so long "blocked" on the paper, was at last agreed to.

Mr. Corbet gave notice that he will ask when the report of the inspectors of Irish lunatic asylums for the year ending March 31st will be presented.

Obituary.

THOMAS OLIVER DUKE, M.R.C.S., L.S.A.

THERE died at Clapham on June 5th one of the fast disappearing class of old-fashioned general practitioners who have done so much to win the confidence of the people for our profession. Mr. Thomas Oliver Duke was born in Sussex in the year 1818. He received his earlier medical education at Winchester Hospital under Mayo and Lyford, and he there acquired a sound preliminary knowledge of anatomy and surgery. Entering Guy's Hospital, he won at the end of his first winter session the gold medal for anatomy, which usually fell to a student who had completed his second year's studies. As soon as he had passed the College and Hall examinations he devoted himself to general practice and settled at Kennington, where, and at Clapham, he practised for forty-two years. For the first fifteen years of this period he was surgeon to the Lambeth Workhouse, but his ideas of what were the rights of the poor brought him into collision with the guardians. In the contest which ensued he was supported by the leading inhabitants of his district, who paid by subscription the expenses connected with a vexatious lawsuit which resulted from his protests against the conduct of the master of the workhouse. He believed in himself and in his power to alleviate and cure disease, whilst the warmth, zeal, and disinterestedness with which he threw himself into his work, together with a singularly handsome presence and winning manner, attached to him a wide circle of patients, who placed absolute confidence in him, and many of whom regarded him with a respect which almost amounted to reverence. It is perhaps to be regretted that he did not devote himself to pure surgery, for which his knowledge of anatomy, his great manual dexterity, his strong common sense, and never-failing presence of mind particularly fitted him. He had for some years been failing in health, but had in no way succumbed, and his death after a few weeks' illness from granular kidney, impacted renal calculus, and great hypertrophy of the heart, fell as a sudden shock on his family and friends.

GEORGE HAMILTON, M.D., L.R.C.S. EDIN.

BY the death of Dr. Hamilton of Falkirk, which occurred at the old manse on Tuesday last, Scotland has lost one of its foremost country practitioners. Dr. Hamilton was busily engaged in practice up till a few days before his death, and though of advanced age retained a wonderful vitality. A native of Edinburgh, he was wholly educated there, receiving his M.D. in 1833 as well as his licence from the College of Surgeons. He practised for nearly half a century in Falkirk and gained a large share of public and professional support. Professionally he was best known by his various writings on

subjects connected with midwifery, and he has done more than any man in Scotland to bring about the present more common use of forceps in midwifery practice. In 1853 he wrote his first paper on the subject, and since then in various medical journals and at the Obstetrical Society in Edinburgh he has continued to urge the more frequent use of the instrument. Up till 1878 Dr. Hamilton used the forceps in about one out of six cases, but latterly he employed the instruments much more frequently. He was the medical attendant of the Institution for Imbeciles at Larbert, and of Campbell Simpson's Asylum at Plean. Dr. Hamilton's three sons have all followed their father's profession, the recently appointed Professor of Pathology in the University of Aberdeen being his second son.

RICHARD SUTTON HARVEY, F.R.C.S. ENG., J.P.

OUR list of deaths this week contains the announcement of the decease of Mr. Harvey, who was well known to the medical profession of Lincolnshire and the adjoining counties. Mr. Harvey was born at Pointon, Staffordshire, in March, 1803. He attended the Middlesex Hospital and the Windmill-street School of Medicine, and in 1826 qualified as M.R.C.S. and L.S.A., while thirty-two years later, in 1858, he was elected a Fellow of the Royal College of Surgeons of England, and in the same year obtained the Fellowship of the Edinburgh College. He was the first house-surgeon of the Lincoln General Dispensary, and, after holding the appointment about two years, entered into practice in Lincoln, which he conducted with great success for nearly forty years. Some years ago the deceased retired from practice and enjoyed a well-earned repose. Mr. Harvey was for many years a member of the Corporation, first as councillor and afterwards as alderman; and he thrice filled the civic chair. During his last mayoralty a substantial testimonial, consisting of his portrait and a service of plate, altogether costing between £500 and £600, was presented to him. The deceased was also the senior justice of the peace for Lincoln.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examination for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on Monday last:—

Ashtown, Herbert Harding, M.B. Edin., Edinburgh.
Bolton, Joseph Shepherd, M.B. Edin., Finstock, Oxon.
Collier, Joseph, L.S.A., Manchester.
Dobie, William Henry, M.B. Edin., Chester.
Hyrons, Ernest Augustus, L.R.C.P. Edin., Pedmore.
Jamesson, Granville, M.B. Edin., Heywood, Manchester.
Keep, Arthur Corrie, M.B. Edin., Wollaston.
Mills, Bernard Langley, M.B. Edin., Edinburgh.
Nash, John Brady, M.B. Edin., New South Wales.
Nore, Ernest Frederic, M.B. Edin., Hurstpierpoint.
Nicolson, Malcolm Alex., M.B. Toronto, East Dulwich.
Parkinson, Chas. Joseph, L.S.A., Greenheys, Manchester.
Patterson, George de Joncourt, M.B. Dub., Dublin.
Price, William Elliott, M.B. Durh., Hereford.
Roy, Silva Prasad, M.B. Calcutta, Calcutta.
Sinha, Narendra Prasanna, L.M. Bengal, Calcutta.
Stapleton, Joseph John, M.B. Edin., New South Wales.

The following gentlemen were admitted Members of the College on Tuesday last:—

Chadwick, Charles Montague, L.S.A., Tunbridge Wells.
Hendley, Harold, Hammersmith.
Horrocks, William Heaton, Bolton, Lancashire.
Lossey, Sandford Scobell, Ealing.
Meads, Bowen Stilon, Blackheath.
Milton, H. M. Nelson, L.S.A., Clapham.
Montford, James, L.R.C.P. Edin., Church Stoke.
Musgrave, Frank Ernest, Leeds.
North, John Howard, Walsall.
Perkins, Alfred Temple, L.R.C.P. Edin., Stoke Newington.
Preston, George, Barton, near Manchester.
Price, John Dudley, Dudley.
Scatchard, Walter, Boston Spa.
Waldy, John, Darlington.
Wilkinson, William Camac, Sydney, New South Wales.
Wilson, Arthur Henry, Islington-square, Liverpool.
Withers, John Sneldon, Sale, Cheshire.

The following gentlemen were admitted Members of the College on Wednesday last:—

Aadland, William Edward, Milnthorp.
Challinor, Cedric, Bolton.
Culhane, F. J. Fitzgerald, Hastings.
Dingley Edward Alfred, Sherborne, Dorset.
Donnet, J. J. Conway, Dover.
Drew, Hedley Vicars, Gloucester-place.
John, David, Swansea.
Jones, David Llewelyn, Llandilo, South Wales.
Lowe, Thomas Pagan, Burton-on-Trent.
Morris, Charles Arthur, Lower Norwood.
Penn, John Evans, Plymouth.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 13th inst.:—

A. G. A. Barker and Thomas Phillips, University College; Charles A. Mac Anally and E. R. B. Archer, Guy's Hospital; T. A. B. Soden, London Hospital; James B. Sutton, Charing-cross Hospital; Chas. P. Maguire, Dublin.

Of the 252 candidates examined during the past fortnight, 88 failed to satisfy the Board, and were referred for three, and 13 candidates for six, months' further anatomical and physiological study.

ROYAL UNIVERSITY OF IRELAND. — The following Degrees were conferred last week by the Vice-Chancellor, Lord O'Hagan:—

DOCTOR IN MEDICINE.—Percy Allport, Martin Henry Atock, Thomas Cahill, William Courtney, Timothy Joseph Crowley, Pierce Joseph Daly, Luke Gerald Dillon, Patrick Joseph Gallwey, John C. Hackett, William Edward Hadden, Henry Aylmer Haines, Samuel Hamill, Samuel Hamilton, Chas. James Holmes, James Macgregor Lithgow, Connor Joseph O'Loughlin Maguire, Robert Carmichael Moore, Patrick O'Gorman, Thomas H. O'Shaughnessy, John Mortlock Phillips, Leonard Robinson, George Atkins Rountree, Arthur W. Sandford, James M. F. Shine, Samuel Stronge, John Wilgar Taylor, Joseph H. Whelan, John W. Williams, James Vance Young.

MASTER OF SURGERY.—Percy Allport, Thomas Cahill, Wm. Courtney, Timothy J. Crowley, Chas. Daly, Pierce Joseph Daly, Luke Gerald Dillon, John C. Hackett, William Edw. Hadden, Samuel Hamilton, Chas. J. Holmes, Samuel William Johnson, William Kelly, Daniel Lehane, Edward M'Connell, John J. M'Cormick, Connor Joseph O'Loughlin Maguire, Robert Carmichael Moore, Thos. H. O'Shaughnessy, Ferdinand A. Purcell, Leonard Robinson, Robert Leonard Rutherford, Arthur W. Sandford, Jas. M. F. Shine, Samuel Stronge, John Wilgar Taylor, Joseph H. Whelan, John W. Williams, Charles Wiseman.

DIPLOMA IN MIDWIFERY. — Percy Allport, Thomas Cahill, James Craig, Timothy J. Crowley, Pierce J. Daly, Patrick J. Gallwey, John C. Hackett, William Edw. Hadden, Chas. J. Holmes, William Nelson, Arthur W. Sandford, Jas. M. F. Shine, Joseph H. Whelan, Chas. Wiseman.

COLLEGE OF PHYSICIANS IN IRELAND. — At the July examinations the following obtained the Licences in Medicine and Midwifery of the College:—

MEDICINE. — Alfred Benjamin Bake, Walter Boyd, Sydenham Davis Chandlee, Austin Nathaniel Cooper, John Crimmin, Owen Henry Evans, Alexander Fleming Harper, Robert John Heatly, John Jas. Irvine, John Henry O'Dowd M'Guinness, John M'Mullan, John Robert Mullins, Katherine Sara Mitchell, Julia Caroline Mitchell-Swaagman, Mathew Flood O'Reilly, Robt. James Tate, Wm. Henry Stoney Walker, David William Whitfield, Michael Thomas Yarr.

MIDWIFERY.—Edm. MacWilliam Bourke, Sydenham Davis Chandlee, Austin Nathaniel Cooper, John Crimmin, Owen Henry Evans, Alex. Fleming Harper, Alfred Adolphus Hayes, Robt. John Heatly, John James Irvine, John H. M'Guinness, John M'Mullan, John Robert Mullins, Katherine Sara Mitchell, Julia Caroline Mitchell-Swaagman, William Reith Scroggie, Robert James Tate, William Henry Stoney Walker, David William Whitfield, Michael Thomas Yarr.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on July 13th:—

Daff, Charles Henry, Gray's-inn-road.
Howse, Percy William M'Dowall, London Hospital.
Munckton, Alfred, Lydiard, St. Lawrence.
Parkinson, Charles Joseph, Manchester.
Parsons, Charles Wm., The Crescent, Copland-road, Hackney.
Reynolds, James Jones, Stoke-by-Clare, Suffolk.
Ryan, Thomas, Scarborough.

The following gentlemen also on the same day passed the Primary Professional Examination:—

John James Langston, London Hospital; Wm. Frederick M'Donogh, Westminster Hospital; V. Harold W. Wingrave, Middlesex Hospital.

UNIVERSITY OF LONDON.—At the Matriculation Examination held last month 66 candidates passed in the honours division, 371 in the first, and 66 in the second.

HASTINGS CONVALESCENT HOME.—The Prince of Wales has forwarded a donation of fifty guineas to the Home, of which his Royal Highness has consented to become patron.

PRESENTATION. — The governor, chaplain, and officers of H.M. Prison, Kirkdale, have presented Dr. James Barr, the medical officer, on the occasion of his marriage, with a pair of handsome bronzes, accompanied with an illuminated congratulatory address.

WHILE bathing in the Holy Loch, near Sandbank, Firth of Clyde, a few days ago, Mr. Morehead Macfarlan, M.R.C.S., was seized with a fit. Although he was got out of the water alive, he died almost immediately afterwards.

RICHMOND HOSPITAL.—Her Royal Highness the Princess Mary Adelaide, Duchess of Teck, has consented to open the new wards of the hospital on Saturday, July 22nd, at 3.30 P.M., and to receive purses containing not less than five guineas in aid of the building and furnishing funds.

ON the 10th inst. the foundation stone of the Torquay Sanitary Hospital was laid by Mr. William Kitson, donor of the site, in the presence of the members of the Local Board and others. The estimated cost of the building is about £3000. The pavilion system will be adopted.

THE death of Mr. J. P. Crosby, L.R.C.P. Ed., medical officer of the Sunderland Workhouse, took place suddenly on Monday last. An inquest having been held on the body, a verdict was returned of "Death from an overdose of morphia." It appears the deceased had been accustomed to resort to the use of the drug as a remedy for sleeplessness.

THE GREAT NORTHERN HOSPITAL.—Lord Cowper presided at a meeting in support of the claims of this hospital on Wednesday evening, in the Athenæum, Highbury He testified to the care with which the patients were treated. Dr. Cholmeley stated that as regarded the alleged abuse of the out-patient department of hospitals, great care had been taken to check this abuse at the Great Northern over a period of five years, and that only seven per cent. of cases were found unfit.

SANITARY INSTITUTE OF GREAT BRITAIN.—At the anniversary meeting held at the Royal Institution on Thursday, July 13th, his Grace the Duke of Northumberland in the chair, an address was delivered by E. C. Robins, F.S.A., F.R.I.B.A., entitled "The Work of the Sanitary Institute of Great Britain." The author specified the objects had in view by the Society and the way in which it had sought to carry them out, and mentioned some points which he regarded as worthy of attention by sanitarians. A vote of thanks was passed to the lecturer.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—On Wednesday, July 12th, a quarterly court of directors of the above Society was held at 53, Berners-street, in the Library of the Royal Medical and Chirurgical Society. Sir George Burrows, Bart., the President, took the chair punctually at 5 P.M. A sum of £1291 10s. was voted to be distributed among sixty-two widows, seven orphans, and three orphans on the Copeland Fund. The expenses of the quarter were £44 7s. 6d. Seven new members were elected, the deaths of four reported, and two had ceased to be members. Fresh applications were read from three widows and one orphan, and the death of one orphan, in receipt of grants since 1877, was reported. The consideration of the proposed alteration of the by-laws was postponed till the October court.

LONDON HOSPITAL MEDICAL COLLEGE.—On Tuesday, the Duke of Cambridge distributed the following prizes to the successful students at this institution:—Entrance science scholarships, £60, Mr. F. J. Smith; Buxton scholarships, £30, Mr. W. R. Hodge; £20, Mr. J. W. Pugh; Letheby prize, £30, Mr. A. J. Richardson; hon. certificate, Mr. F. H. Taylor; scholarship in anatomy, physiology, and chemistry (open to first and second year's students), £25, Mr. F. Hitchens; hon. certificate, Mr. G. H. Ailden; scholarship in human anatomy (open to first year's students), £20, Mr. H. Cropley; hon. certificates, Mr. F. J. Smith, Mr. H. Tonks; scholarships in clinical medicine, £20, Mr. R. F. Fox; hon. certificate, Mr. J. Sinclair; scholarship in clinical surgery, £20, Mr. R. F. Fox; hon. certificate, Mr. J. C. Davies; scholarship in clinical obstetrics (a prize of £15 being awarded by the lecturer on obstetric medicine to the holder of this hon. certificate), £20, Mr. A. J. Richardson; hon. certificate, Mr. R. F. Fox; minor surgery prizes, £15, Mr. J. M. Evans; £15, Mr. J. E. Crisp; £10, Mr. J. Thomas; £10, Mr. F. Hitchens; dissection prizes, £6, Mr. H. Jaboor, junior; £4, Mr. H. Jaboor, senior; osteology prizes, £6, Mr. J. Vincent; £4, Mr. C. T. Samman.

COMPULSORY NOTIFICATION OF CONTAGIOUS DISEASES BY MEDICAL MEN.—On July 11th, a meeting was held at the Lecture Hall, Greenwich, to consider the clause in Mr. Hastings' Bill compelling medical men to notify cases of infectious disease in their practice to the sanitary authorities. Dr. Prior Purvis occupied the chair. The following resolutions were unanimously carried:—1st. "That we form ourselves into an association for the simple purpose of resisting the attempts that are being made to compel medical men to notify cases of infectious disease." 2nd. "That we affiliate with the Liverpool association formed for a similar purpose." 3rd. "That Dr. Prior Purvis be elected chairman for the first year, and Dr. Alexander Forsyth hon. secretary and treasurer."

HOSPITAL SUNDAY.—The Committee of Distribution of the Metropolitan Hospital Sunday Fund met on Wednesday to apportion to the London hospitals the largest collection yet made in the metropolis. Since the fund was instituted in 1873, the sum of £284,000 has been collected through its agency for the London hospitals, the amounts each year varying from a minimum of £24,005 in 1878 to a maximum of some £33,000 in 1882. Last year the Council received its first legacy of £300, an example which ought to be widely followed by those who desire to leave money to hospitals, because by adopting this course they have an absolute guarantee that their charity will be dispensed in exact proportion to the merits and claims of each institution. Hospital Sunday, which was first established in Birmingham in 1859, did not take root in the metropolis until 1873, notwithstanding the fact that from the end of 1869 until Sir Sydney Waterlow became Lord Mayor, a period of some four years, month after month THE LANCET strongly urged the desirability "of half a dozen secretaries of the leading London hospitals, backed by some of the most influential members of the governing bodies, interviewing the Lord Mayor, and asking him to put himself at the head of the Hospital Sunday organisation." Once started in London, the movement soon spread to all parts of the country, and within the last two years it has crossed the Atlantic and become an American institution. Everywhere Hospital Sunday seems to flourish, and by its means the hospitals of this country have already benefited to an extent which cannot be much less in the aggregate than £1,000,000.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANDERSON, JAMES, M.D., C.M.Aber., has been appointed Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria-park.

ANNANDALE, THOMAS, F.R.C.S.Ed., M.R.C.S., has been appointed Consulting Surgeon to the Royal Hospital for Sick Children, Edinburgh, vice *Prof.* Spence, deceased.

BRICKWELL, BENJ. ARTHUR, M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Amersham Union.

DANCY, HORACE M., M.D.Glas., L.S.A.Lond., has been appointed Medical Officer to the Farnsfield District of the Southwell Union.

GRAHAM, ALBERT W., L.R.C.P., L.S.A.Lond., has been appointed House-Surgeon to the Hobart General Hospital, Tasmania.

GRIPPER, ARTHUR DOUGLAS, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer to the Grassington District of the Skipton Union.

HARDING, RICHARD, L.R.C.P., L.F.P.S.Glas., has been appointed Medical Officer to the Presteigne District, Knighton Union.

JACKSON, SANDFORD, M.B., has been appointed Assistant House-Surgeon to the Brisbane Hospital, at a salary of £250 per annum, and apartments.

KEMP, JOHN R., L.R.C.P.Lond., M.R.C.S., has been appointed Clinical Assistant to the Westminster Ophthalmic Hospital.

KESTEVEN, LEIGHTON, M.R.C.S., has been appointed House-Surgeon to the Brisbane Hospital, at a salary of £500 per annum, and residence.

LIVETT, HENRY WM., L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Wells Urban Sanitary District.

MARLEY, WM. LANE, M.R.C.S., has been appointed Surgeon to the Port Douglas Hospital, Queensland.

MARSDEN, THOMAS, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Third District and Workhouse, Bridgwater Union, vice Axford, resigned.

MORGAN, JOHN H., F.R.C.S., has been appointed Consulting Surgeon to St. George's Dispensary.

MORTON, CHARLES A., M.R.C.S., L.R.C.P.Lond., has been appointed Senior House-Surgeon to the Stanley Hospital, Liverpool.

RUSSELL, M. W. H., M.R.C.S. & L.S.A.Lond., has been appointed Resident Medical Officer to the Bath Royal United Hospital, vice Pratt, resigned.

SANDERS, JOHN WILLIAM, M.D., has been appointed Resident Medical Officer to the Bethnal-green Infirmary, vice Boyd, resigned.

SAUNDERS, CHAS. EDW., M.D., C.M.Ed., M.R.C.P.Lond., has been reappointed Medical Officer of Health to the Tring Urban Sanitary District.

SHAW, WALTER, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Burghill District, Hereford Union.

WHITE, EDW. ARTHUR, M.D., C.M.Aber., L.S.A.Lond., has been appointed Medical Officer to the Third District of the Malmesbury Union.

WILSON, CHAS. WM., M.B.Durh., M.R.C.S., has been appointed Medical Officer to the Southern District and Workhouse of the Cirencester Union, vice Hodges, resigned.

WOODHEAD, GERMAN SIMS, M.D., C.M., M.R.C.P.Ed., has been appointed Pathologist to the Royal Hospital for Sick Children, Edinburgh, vice Hamilton, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BARNES.—On the 16th inst., the wife of R. Barnes, M.D. (of Harley-street), of a daughter (stillborn).

COATS.—On the 14th inst., at Elmbank-crescent, Glasgow, the wife of J. Coats, M.D., of a daughter.

DUNLOP.—On the 10th inst., at St. Helen's, Holywood, co. Down, Ireland, the wife of Archibald Dunlop, M.D., of a daughter.

HEELAS.—On the 9th inst., at Buckhurst, Primrose-hill-road, Hampstead, the wife of James Heelas, M.D., of a daughter.

MUTCH.—On the 7th inst., at Sneinton-road, Nottingham, the wife of F. Robertson Mutch, M.B., C.M.Aberd., of a daughter.

NEILL.—On the 17th inst., at 2, The Terrace, Ryde, Isle of Wight, the wife of Channing Neill, M.D., of a son.

ROBERTSON.—On the 12th inst., at The Friarage, Penrith, the wife of J. D. Robertson, M.D., of a son (stillborn).

SHARPLES.—On the 15th inst., at Wellfield House, Farington, the wife of T. Sharples, Surgeon, of a son.

WOOD.—On the 12th inst., at Lees Lodge, Yalding, Kent, the wife of E. J. Wood, M.B.Cantab., of a daughter.

MARRIAGES.

ATTLEY—THORNE.—On the 13th inst., at St. Jude's Church, Southsea, Surgeon John Attley, R.N., son of D. Attley, Esq., of Keel Hall, Desert, Cork, to Katie Coppinger, youngest daughter of James Lyon Thorne, R.N., of Somerset House, and granddaughter of the late Captain William Thorne, 3rd Buffs, of Carline, co. Cork.

COLDSTREAM—BROCK.—On the 12th inst., at Hillhead Parish Church, Glasgow, Alexander R. Coldstream, M.D., F.R.C.S.E., of Newington, Edinburgh, to Margaret Mary, second surviving daughter of George Brock, Esq., of Greenland, Tourso.

DAY—O'LEARY.—On April 27th, at the Church of the Garça, Pernambuco, William A. Day, M.R.C.S., to Mary Louisa Charlotte, eldest daughter of the late Daniel O'Leary, of Bath (England).

MACLEOD—MARJORIBANKS.—On the 11th inst., at the Parish Church, Scotby, Carlisle, M. D. Macleod, M.B.Ed., Medical Superintendent of the East Riding Asylum, Beverley, to Daisy, youngest daughter of the late Samuel Marjoribanks.

MILLER—WHITE.—On the 11th inst., at Trinity, by the Rev. D. Kilpatrick, of Newhaven, G. Miller, M.D., of 9, Rankeillor-street, Edinburgh, to Margaret, eldest daughter of the late John White, Esq., of Garlton, East Lothian.

WRIGHT—BATEMAN.—On the 12th inst., at St. Saviour's, Aberdeen-park, N., Christopher St. John Wright, M.B., M.R.C.S., of Priors Marston, Warwickshire, to Agnes Louisa, daughter of the late Henry Bateman, F.R.C.S., of Canonbury-lane, N.

DEATHS.

COTTON.—On the 12th inst., at the Royal Naval Hospital, Stonehouse, Inspector-General John Cotton, M.D.

DICKIE.—On the 15th inst., at Albyn-terrace, Aberdeen, George Dickie, M.D., F.R.S., Emeritus Professor of Botany.

DODGSON.—On the 10th inst., at Derwent House, Cockermouth, Henry Dodgson, M.D.Edin., L.S.A.Lond., L.R.C.S., F.R.A.S., F.M.S., aged 49.

HARVEY.—On the 16th inst., at his residence, St. Mark's-terrace, Lincoln, Richard Sutton Harvey, J.P. & F.R.C.S., aged 70.

MILNER.—On the 11th inst., at The Crescent, Salford, Ralph Milner, M.R.C.S., L.S.A.Lond., aged 64.

MOFFAT.—On the 16th inst., Thomas Barbour Moffat, M.D. &c., of Hawarden, Flintshire, where he had carried on his profession for 45 years, aged 69.

SILVER.—On the 16th inst., at his residence, Upper Tooting, Alexander Silver, M.A., M.D., M.R.C.P., of 2, Stafford street, Old Bond-street, Physician to Charing-cross Hospital, aged 41. (Interment will take place at Brompton Cemetery at 1 o'clock on Saturday.)

WIGHT.—On the 28th ult., at St. John's, Canada East, near Montreal, Robert Wight, M.D., eldest son of the late Robert Wight, Esq., Colonial Bank, London, in his 69th year.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REPORT from the Board and the Court of Examiners of the number of candidates who have presented themselves for the primary and pass examinations for the Diploma of Member of the College during the collegiate year 1881–82, showing the number who have passed and have been rejected from each Medical School during that period.

PRIMARY EXAMINATIONS.

Medical Schools.	Totals.	Number passed.	Number rejected
St. Bartholomew's	158·50	117·50	41
University College	111	69	42
Guy's	106·50	71·50	35
King's College	63·50	36	27·50
London	57	44·50	12·50
St. Thomas's	50·50	26	24·50
St. George's	48	28	19
Middlesex	40	26	14
Charing-cross	34·83	24·50	10·3
St. Mary's	22·3	14	8·3
Westminster	23	14	8
Manchester	67	47·50	19·50
Cambridge	32·3	24·50	7·83
Liverpool	30·50	19	11·50
Leeds	26·50	18	8·50
Birmingham	21	16	5
Newcastle-on-Tyne	19·50	15·50	4
Bristol	15·50	12·50	3
Sheffield	6·3	2·3	4
Dublin	20	8	12
Belfast	5·3	2·83	2·50
Galway	1	1	....
Cork	1	....	1
Edinburgh	76·50	55	21·50
Glasgow	13	6	7
Aberdeen	2·3	2·3	....
Toronto	5·50	3	2·50
M'Gill College, Montreal	2	2	....
Kingston	2	2	....
Halifax	·50	·50	....
New York	1	....	1
Yale	·50	·50	....
Harvard	1·50	....	1·50
Calcutta	5·50	4	1·50
Madras	4·50	3·50	1
Bombay	3	3	....
Melbourne	2	2	....
Paris	·50	·50	....
Madrid	·50	·50	....
Totals	1091	744	347

May 13th, 1882. HENRY POWER, Chairman of the Board.

PASS EXAMINATIONS.

Medical Schools.	Totals.	Number passed.	Number rejected
St. Bartholomew's	115·3	72·50	42·83
Guy's	83·50	53·50	30
University College	58	30·16	27·83
London	44	33·50	10·50
St. Thomas's	37	23·50	13·50
King's College	35·50	22	13·50
St. George's	33·50	23·50	10
St. Mary's	29	15·50	13·50
Charing-cross	27·50	16·50	11
Middlesex	23·3	17·3	6
Westminster	7·50	4·50	3
Leeds	28·50	13·50	15
Manchester	28	18	10
Liverpool	14·3	4	10·3
Cambridge	14	10·50	3·50
Birmingham	13·50	9	4·50
Newcastle-on-Tyne	8·50	3·50	5
Sheffield	8·50	4·50	4
Bristol	3·50	2·50	1
Dublin	7·50	4	3·50
Galway	1	1	....
Cork	·50	·50	....
Edinburgh	18	10	8
Glasgow	4·83	2·3	2·50
Aberdeen	3	2	1
Bombay	4	3·50	·50
Calcutta	1·50	·50	1
Toronto	2·50	1·50	1
M'Gill College, Montreal	2	1·50	·50
Kingston	1·50	1·50	....
Melbourne	2·6	2·6	....
New York	·50	·50	....
Madrid	·50	·50	....
Paris	2·50	1·50	1
Malta	·50	·50	....
Totals	666	412	254

Note.—In the above lists candidates who are indicated by a fraction have received their education at more than one School of Medicine.

May 19th, 1882. JOHN BIRKETT, Chairman of the Court.

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, July 20th, 1882.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
July 14	29·64	W.	64	60	117	73	56	..	Cloudy
,, 15	29·49	S.W.	64	62	118	72	60	..	Raining
,, 16	29·64	S.	67	60	115	73	54	·06	Bright
,, 17	29·79	W.	64	59	117	73	54	..	Cloudy
,, 18	29·88	W.	63	59	114	72	55	·15	Cloudy
,, 19	30·05	S.W.	64	58	115	73	53	..	Cloudy
,, 20	30·17	W.	61	57	117	72	50	..	Cloudy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

FIRST YEAR'S EXAMINATION IN ELEMENTARY ANATOMY AND PHYSIOLOGY.

WE have received a long disputatious rejoinder from Mr. Butlin on our remarks last week. As no useful purpose can be served by the publication of statement and counter-statement, no matter how vigorous the language or how complacent the tone, it is not necessary to publish the correspondence. It may be enough to remark that it is our misfortune to be completely and hopelessly at variance with Mr. Butlin's opinions of the nature, purport, and value of first year's examinations in elementary anatomy and physiology when conducted by teachers at the medical schools.

Enquirens might consult Dr. Hardwicke's "Medical Education and Practice in all Parts of the World."

Mr. Phillips Hills is thanked.

"INVETERATE BOILS."

To the Editor of THE LANCET.

SIR,—In your last issue "Subscriber" asks for suggestions as to the treatment of a case of inveterate boils. In reply, I would refer him to what I have said on this subject in THE LANCET for 1874, vol. i., and for 1869, vol. ii. Let him carefully follow the instructions there given as to the insertion of the carbolic acid into the formed boil through its one or several openings; let him discard all ideas as to boils being a means of throwing out of the system morbid matters; and let him act upon the conviction that boils are local, parasitic, and contagious. Let the patient take a daily morning bath; let him avoid any undue pressure upon or injury to the skin; and let especial care be taken to destroy each incipient boil in its earliest stage by any good strong caustic acid: nitrate of mercury, nitric acid, strong solution of carbolic acid, or nitrate of silver.

But as boils, like other parasitic diseases, chiefly occur where there is defective hygiene or deficient health, let the patient also live carefully and temperately, and be treated with any general remedial measures which may appear appropriate. A somewhat extended experience of such cases induces me to believe that by such measures "Subscriber" will not be long in securing a cure of his case.

I am, Sir, yours obediently,

Norwich, July 18th, 1882. PETER EADE, M.D., F.R.C.P.

To the Editor of THE LANCET.

SIR,—In last week's LANCET "Subscriber" wishes hints regarding the treatment of the above. I have found that tincture of arnica given in fifteen-drop doses in a little water every two hours for twenty-four hours, and afterwards every six hours for a week, entirely removes attacks of boils. If "Subscriber," after a fair trial, would give the result in THE LANCET I would feel obliged.—I am, Sir, yours, &c.,

July 17th, 1882 F.R.C.S.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

AT the written portion of the Pass Examinations for the diploma of membership of the Royal College of Surgeons the following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the 280 candidates on the 14th inst., when they were required to answer at least four, including one of the first two, out of the six questions, from 1.30 to 4.30 P.M.:—

1. What structures of surgical importance pass through the parotid gland? What is their relative situation, and what are the relations of the gland itself?
2. Describe the parts composing the ankle-joint, giving the forms of the articular surfaces, the attachments of the ligaments, the movements of the joint; and mention, in order, the structures in direct relation with the joint.
3. By what symptoms would you be led to infer the existence of a loose body in a joint, say the knee? How would you treat such a case?
4. Give the clinical symptoms which mark the progress of caries of the vertebral column proceeding to a fatal termination; and indicate the treatment you think proper in the several stages of this disorder.
5. A man is stabbed through the anterior fold of the axilla, and serious hæmorrhage occurs. What vessels may have been wounded, and what treatment would you adopt?
6. Describe syphilitic iritis, detailing the symptoms and treatment.

The following were the questions on Midwifery and the Diseases of Women and Children submitted to the candidates the following day, the 15th inst., when they were required to answer three out of the four questions, between 12.30 and 2 P.M.:—

1. What are the causes of secondary hæmorrhage after labour? How would you treat it?
2. In what circumstances, and how, would you induce labour at the seventh month?
3. How would you estimate the size and shape of a supposed contracted pelvis?
4. How would you differentiate the following conditions:—Pregnancy at the sixth month, an ovarian tumour reaching to the umbilicus, a uterine fibroid reaching to the umbilicus, and effusion of blood reaching to the umbilicus?

The following were the questions on the Principles and Practice of Medicine, to be answered the same day, from 2.30 to 4.30 P.M., when they were required to answer three out of the four questions, including question 4.

1. What are the consequences, local and general, and what the diagnostic signs, of the following varieties of heart disease?—(*a*) Obstruction at aortic orifice; (*b*) incompetence of aortic valve; (*c*) obstruction at mitral orifice; (*d*) incompetence of mitral valve.
2. What are the various causes of obstruction of the œsophagus? and how would you distinguish them clinically from one another?
3. Discuss the morbid anatomy and symptoms of the different kinds of goitre, and their relations to other morbid states.
4. Describe the composition, dose, and uses of the following preparations:—Liquor arsenicalis; liq. bismuthi et ammoniæ citratis; liq. hydrargyri perchloridi; liq. ferri pernitratis; pilula phosphori; pil. plumbi cum opio; pil. quiniæ; pil. saponis composita; pulvis cretæ aromaticus cum opio; pulv. ipecacuanhæ compositus; pulv. jalapæ compositus; pulv. kino compositus; vinum antimoniale; vin. colchici; vin. ipecacuanhæ; vin. quiniæ.

Mr. Charles Lunn.—The insertion of the letter would open a discussion for which at present we have not space.

CONVULSIONS IN CHILDREN.

To the Editor of THE LANCET.

SIR,—In Dr. Eustace Smith's paper on the above subject (see THE LANCET of the 15th inst.) I am surprised to find that he advocates the use of the warm bath in doubtful cases as to the exciting cause of the seizure. Allow me to point out that the bath is a most dangerous experiment under such circumstances, and I am sure that the writer of the article will be ready to admit that it is not to be recklessly resorted to when it is remembered that overfeeding is a very common source of mischief in the case of hand-fed infants by ignorant mothers and nurses; that an overloaded stomach frequently causes convulsions; and that a bath under such conditions would most assuredly intensify the mischief. I trust that Dr. Eustace Smith will see fit to modify his recommendation of the bath in convulsive seizures, as young practitioners might be misled by the unqualified statement of such an authority.

I am, Sir, yours obediently,

July 17th, 1882. M. A. B.

VACHER'S FORCEPS.

To the Editor of THE LANCET.

SIR,—I should feel much obliged if some of your correspondents would give their experience in the use of Vacher's holding midwifery forceps, or Draper's modification of the same instrument. I am anxious to know the class of cases for which it is suitable, and also the limits to its use as regards the stage of labour and state of the parts.

I am, Sir, yours truly,

London, July 11th, 1882. J. BENSON COOKE.

DISPENSING IN VILLAGE PRACTICES

Mr. Kenneth W. Millican, B.A. Cambridge, M.R.C.S.—We quite agree with our correspondent that in such circumstances it would be almost cruel for the practitioner not to dispense his medicines. Much has to be done yet, by accommodation on the part of chemists, before medical men can abandon dispensing altogether. Meantime, when there is so much convenience in it, it cannot be degrading, though it may be irksome. We have received a large number of letters on this subject, but our space will not permit of their publication.

UNQUALIFIED ASSISTANTS IN BIRMINGHAM.

THE *Daily Mail* has a short article, but one much to the point, on the number of unqualified assistants in Birmingham and the countenance they receive from properly qualified medical men. After the recent decision in the case of Mr. Murdoch, medical men will do well to supervise very closely their unqualified assistants.

THE CLIMATE OF DENVER.

To the Editor of THE LANCET.

SIR,—Nearly all places on the North American Continent, those excepted near the coasts and far to the south, have a far larger range of temperature than we are accustomed to. Denver is certainly no exception to this rule; its mean temperature is 50°, almost the same as that of London and Devonshire; and its rainfall is 24·50 inches, much less than that of most English towns, though not more than that of a few places in our Eastern Counties. The distribution of rain is decidedly more irregular than with us, our normal rainfall in the Midland and South-eastern Counties averaging from two to three inches every week through the year. At Denver the winter is extremely dry, the monthly rainfall ranging from one-tenth of an inch to two inches, while in the summer from four to even ten inches may fall in a month. Every meteorologist, however, knows that the rainfall varies more in different seasons than any other meteorological element. The temperature at Denver is as follows. I give the mean, the maximum, and the minimum of every month, and the ranges:—

Month.	Mean.	Max.	Min.	Range.
January	28·3	59	2	57
February	37·7	68	7	59
March	34·4	70	3	67
April	49·3	82	4	78
May	57·1	85	32	53
June	65·8	97	38	59
July	68·1	95	53	42
August	68·9	98	50	48
September	61·7	92	32	60
October	54·1	84	27	57
November	37·3	75	5	70
December	37·3	66	−3	69

In other words, the five cold months are decidedly colder than with us; the five warm months are as decidedly warmer; while April and October are not very different from the same months in Devonshire in mean temperature, though the extremes are far greater.

The air at Denver is undoubtedly dry, and the amount of sunshine large. Persons going from the damper and hotter southern States find the climate of Denver bracing and exhilarating, and many people for a time like it. Two very distinguished Englishmen who visited it some years ago loudly complained of the enormous range of temperature, and one of them, a scholar of European reputation, spoke of the days as feeling intensely hot and the nights as being unbearably cold. This would be no oratorical exaggeration, for a diurnal range of over fifty degrees is not unknown, and the midday sun in that dry inland climate and comparatively low latitude is rather too powerful to suit an Englishman.

I am, Sir, yours faithfully,

Wimborne, July, 1882. ALFRED J. H. CRESPI.

Enquirer.—It is against our rule.

THE letter of *M. O. H.* (Mansfield) would have more weight with the name attached.

Mr. T. S. Clayton.—5, York-buildings, Duke-street, Adelphi, W.C.

PUERPERAL EPILEPTIC CONVULSIONS.

To the Editor of THE LANCET.

SIR,—I am very glad to see by THE LANCET of April 8th and 15th that Messrs. Lucas and Beatty have been successful in treating puerperal convulsions by the hypodermic injection of morphia. Since publishing my last cases I have to add five additional ones, in all of which this method has been tried with excellent results. These and the cases reported by Messrs. Lucas and Beatty, together with sixteen I collected previously, make twenty-six in all. In no single case has the morphia yet failed. Of course a much larger number of cases will be required to settle the exact value of this procedure as to its success and its possible danger. In the meanwhile, remembering that Churchill's statistics give a mortality of one in every four and a half cases of puerperal epileptic convulsions, I think that a record of twenty-six cases, many of them of a very severe character, in every one of which the fits were stopped and the patients recovered, is sufficiently encouraging to warrant the giving of this treatment a fair trial.—I am, Sir, yours faithfully,

Geelong, Victoria, June 5th, 1882. S. MABERLY SMITH.

ELEPHANTIASIS SCROTI.

WE recently referred to a paper on Elephantiasis of the Scrotum, by Dr. G. A. Turner, which appeared in the *Glasgow Medical Journal*. We are requested by Dr. Turner to correct two inaccuracies in regard to Dr. G. V. MacDonagh which inadvertently crept into the paper in question. It appears that Dr. MacDonagh did not witness O'Farrell's operation, and that he did not obtain a hint for the design of his clamp from Druitt's *Vade Mecum*, in the editions of which up to the ninth no mention of it is made. It was stated that in Dr. MacDonagh's second operation one testicle was removed; the fact is, both testicles were preserved.

C. D. A.—The information with regard to dairies is, we believe, furnished by the dairy keepers, and they should apply to be put on the register. The premises are then inspected. The local authority attend to the expenses. A short time ago, in the House of Commons, Mr. Mundella stated that a Bill was about to be introduced to regulate dairies and their inspection.

THE request of *Drs. Bernard* and *Donaldson* shall have attention.

Dr. Caddy.—We do not see any novelty in the apparatus.

ACUTE ALCOHOLIC DELIRIUM.

To the Editor of THE LANCET.

SIR,—In reference to the case of alcoholic delirium mistaken for hydrophobia, which is referred to by your Paris correspondent in THE LANCET for July 8th, I may relate a somewhat similar case, which occurred at the Tottenham Training Hospital a few weeks ago.

The patient was drinking at a neighbouring public-house on Whit Monday when the symptoms occurred. According to all accounts, he had not drunk more than one or two pints of ale when the attack came on. He became suddenly maniacal, bit off and ate part of a glass tumbler, and attacked his wife and others who were near. He was brought to the hospital strapped on a stretcher by a policeman, and then exhibited tendencies to injure himself and those around him, repeatedly dashing his head violently against the stretcher, and snapping at fingers and hands which came within reach. A medicine glass containing some chloral and bromide of potassium was offered him, but he seized the glass with his teeth, bit off a considerable piece, and then proceeded to munch and swallow it. A hypodermic injection of about half a grain of hydrochlorate of morphia was then administered, and the delirium subsided in about half an hour. About two hours after his admission he went home, walking steadily, and in his right mind, and, as far as is known, has suffered no injurious effects from his novel meal. His wife stated that drinking had produced a similar effect on him at previous times.

Are we to look on such a case as one of idiosyncrasy with respect to alcohol, or is it more likely that the effects were due to some other poison adulterating the ale?—I am, Sir, yours faithfully,

Tottenham, July 8th, 1882. SIDNEY DAVIES, B.A. Oxon., &c.

J. C. M.—The principle is well understood that the obstetric fee only covers the attendance at the time of confinement and for a reasonable period after. It certainly is not intended to cover attendance during pregnancy, nor visits paid after ten or twelve days from the time of delivery. A little explanation will probably satisfy our correspondent's patient. The charges appear quite reasonable.

M. C.—Both the English and Irish Registration Acts contain a compulsory clause under which it is incumbent upon every registered medical practitioner to furnish, for registration purposes, a medical certificate stating to the best of his knowledge and belief the cause of the death of each patient who has been attended by him during such patient's illness.

Mr. Samuel Coates.—The conduct does not seem very kind or professional.

THE CAUSE OR CAUSES OF ACUTE TONSILLITIS.

To the Editor of THE LANCET.

SIR,—Having been myself in times past a frequent sufferer from quinsy, and having been careful always to make inquiries of those who have come under my care as to the cause or causes which have brought it about, I think my views are entitled to some amount of consideration. First, then, I would say that it is a disease which occurs but seldom after twenty-one; that it is essentially adynamic in type; and that it is always the result of an exhausted nervous or muscular system. Exposure to cold has apparently little or nothing to do with its causation, for it is a positive fact that wrapping up the throat in no way tends to prevent it. Defective ventilation may have something to do with its causation, but still I think it will be found to exist almost, if not quite, as much in well- as in ill-ventilated houses. In my own case I used to notice, and I have been able to extract the same information in nearly every other instance, that there was over-exertion and often great irregularity in meals prior to the attack. In fact, a week of really hard work and irregular meals would be sufficient even now to knock me over with quinsy. I trust these few remarks will give rise to a little discussion, as I am sure that the pathology of quinsy is but little understood.

I am, Sir, your obedient servant,

Kingston-on-Thames, July, 1882. F. P. ATKINSON, M.D.

ERRATUM.—In Mr. Hodges's letter on Anæsthetics, published last week, page 80, instead of "we calculate etherisation costs the infirmary now 3s. 4d. less than formerly," read "three-fourths less," &c.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Grally Hewitt, London; Sir Edmund Lechmere, London; Mr. White Wallis, London; Mr. James Wyld, London; Dr. Turner, Glasgow; Mr. Isaac Shone, Wrexham; Dr. Shirtliff, Kingston; Mr. Coates; Mr. Walker, Stapleton; Mr. Millican, Kineton; Messrs. Willeringhaus, Klinker, and Co.; Dr. Julius Pollock, London; Mr. Thomas Gray, London; Mr. Simeon Snell, Sheffield; Dr. Higham Hill, London; Dr. Trotter, Blyth; Drs. Bernard and Donaldson, Londonderry; Mr. Shepperson; Mr. J. H. Morgan, London; Mr. A. E. Barker, London; Mr. Freeland, Antigua; Mr. Dovey; Dr. Lediard, Carlisle; Dr. M'Munn, Belfast; Mrs. Baines, London; Mr. Reid, Kirkintilloch; Dr. Makuna, London; Dr. Dearden, Church; Mr. C. Lunn, Edgbaston; Mr. Bennett May, Birmingham; Mr. Watkins, Exeter; Dr. Rutherford, Ballinasloe; Mr. O'Callaghan; Mr. E. James, Chelsea; Mr. Cousans, Lincoln; Dr. Philpots; Mr. Wheeler, Ilfracombe; Mr. Forrest, Manchester; Mr. Petter, Yeovil; Mr. Bury, Wrexham; Mrs. Ridley, Yateley; Dr. Broom, Clifton; Mr. Higgins, London; Mr. Henry Morris, London; Mr. Lowndes, Liverpool; Mr. Goude, London; Mr. E. Gill, Kendal; Dr. Eade, Norwich; Dr. Wesley Miller, New York; Mr. K. Thornton, London; Mr. Briscoe, London; Mr. H. G. Reid, London; Mr. Clark, Preston; Dr. Maberly Smith, Geelong; Mr. L. Kesteven, Brisbane; Dr. Scott, Southampton; Mr. Bradburn, Eccles; Messrs. Paul and Co., London; Mr. Whetford, London; Mr. Brown, Westgate-on-Sea; Mr. Highatt, Gosport; Dr. Sutton, Oldham; Dr. Dobson, Windermere; Dr. Gordan, Walsall; Dr. H. V. Carter; F. G.; Nemo; G. P.; D. T., Tonbridge Wells; C. D. A.; J. C. M.; M.R.C.S., Birmingham; An Edinburgh Licentiate; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Eccles, Newcastle-on-Tyne; Dr. Berkart, London; Dr. Marsden; Mr. Moore, Teel; Mr. Chesebrough, London; Mr. Van Praagh; Mr. T. Bryant, London; Mr. Eschwege, London; Mr. Land, Tunbridge; Mr. Witt, Lynn; Mr. Brockelbank, Islington; Mr. Bennett, Burnley; Mr. Abbs, Dewsbury; Mr. Armstrong, Harpurhey; Messrs. Maclehose and Co., Glasgow; Dr. Thomas, Glasgow; Messrs. Stone and Swanson, London; Dr. Mitchell, Brockley; Mr. Toyne, Sheffield; Dr. Laffan, Cashel; Messrs. Squire and Co., London; Mr. Hay, Hull; Messrs. Oliver and Boyd, Edinburgh; Mr. Walton, Cradley Heath; Messrs. Deighton and Co., Cambridge; Mr. Sloane, Bradford; Mr. G. Lawson, London; Dr. Thompson, Kidderminster; Messrs. Corry and Co., Belfast; Mrs. Theobald, Leicester; Mr. Townsend, Exeter; Messrs. Douglas and Mason, Edinburgh; Mr. Preston, York; Mr. Harding, Westgate-on-Sea; Mr. Darke, London; Mr. Beaulands; Mr. Scott, Manchester; Mr. Jones, Edinburgh; Mr. Wood, Burslem; Dr. Dobell, London; Mr. Hopkinson, Nottingham; Dr. Jackson; Mr. Smith, Nottingham; Mr. Sharples, Preston; Mr. Neill, Ryde; Dr. Drysdale, London; Mr. Petherick, Exeter; Messrs. Schacht and Co., Clifton; Mr. Sykes; Dr. Mutch, Sneinton; Mr. Boone, Shanal; Messrs. Lehmann and Co., London; Messrs. Mottershead and Co., Manchester; Mr. Woodmann, Bridgwater; Mr. Miller, Edinburgh; Dr. Kerr; Mr. Clegg, Hartshill; Dr. Cameron, Epworth; Messrs. Kilner Brothers, London; Mr. Shone, Wrexham; Mr. Crondace, Castle Carey; Messrs. Gillon and Co., Leith; Mr. Bartlam, Broseley; Dr. Foote, Rotherham; Mr. Bryan, Hornsey; M.D., Edgware-road; J. D. M.; N. R. G., Dublin; W. W., King's-cross; F.R.C.S., Blackpool; G., Wigan; T. C. H., Bradford; Hygiene; B. F.; L.R.C.P.L., London; H. F. V.; Lynburn, Glasgow; Montague, London; Medicus, London; Assistant, London; Med., Market Bosworth; Medicus, Rochdale; Mac; Accountant; C. J. H.; Sanitas Co., London; Zeta, Walsall; M.R.C.S., Worle; Beta, London; T. M., St. Helens; R., Crediton; C. W. D.; D. M., Edinburgh; A., Liverpool; M.D., Commercial-road; R.; T. E., Berne-street; M. P.; Graduate; J. W. P., Holborn; York, Edinburgh; Medicus, Glasgow L. S. A., Halifax; A. F., Clifford's Inn; Medicus, Sunderland; R. Y.; Medicus, Hampstead; X. Y., Edinburgh; Medicus, Camberwell; M. R.; Vigilo et Spero; House Surgeon, Bournemouth; Medicus, Mile-end-road, &c., &c.

Whitby Times, Journal of the Vigilance Association, Church of England Temperance Chronicle, Warehousemen's and Drapers' Journal, Kendal Mercury and Times, Glasgow Herald, Printing Times, Walthamstow and Leighton Guardian, Melbourne Argus, Sunderland Daily Echo, Westminster and Chelsea News, Weymouth Guardian, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 24.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

Tuesday, July 25.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, July 26.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, July 27.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, July 28.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Annual General Meeting.

Saturday, July 29.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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